



Fleet Implementation Guide

Mastercard Corporate Fleet card[®] Program



This Guide is materially accurate as of the date of publication but is subject to all Mastercard Rules, Regulations, By-laws and procedures in effect from time to time, some of which may have changed provisions of the Guide. Contact your Product Specialists for updates and changes.

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1.0 Introduction

This guide introduces the Mastercard Fleet Program to issuers and acquirers. It is intended to help Mastercard Fleet issuers plan and launch Fleet Programs while building on their investment in EMV and, more specifically, the Mastercard EMV-based payment application M/Chip.

The Mastercard Fleet card is typically used by companies or public sector entities to purchase fuel and maintenance related services for their fleet vehicles. Fleet managers leverage a fleet card to capture critical data for managing their vehicles and drivers in a cost-efficient and convenient manner through robust acceptance and M/Chip technology.

The Mastercard Fleet Program enables drivers to fuel up and purchase ancillary goods and services under the control of the Fleet owner. Each Fleet Program will have different requirements, both business and technical. This guide provides an overview of the Mastercard Fleet card Program from both the issuing and the acquiring perspective.

This guide looks at the implementation considerations after the definition of the best cardholder proposition. Specifically, the combination of payment and Fleet/multi-card functions and the appropriate risk management after the decision to launch has been taken. It focuses on the key considerations during the preparation, development and implementation phases of a Mastercard Fleet Program.

Issuers who have decided to launch a Fleet card will need to manage a number of changes. The key to this challenge is to develop a coherent set of business requirements that enable thorough advance preparation in identifying major impacts, assessing the scope, choosing appropriate solutions and design. This guide assists issuers in identifying required changes and planning a successful implementation.

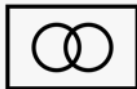


2.0 General Overview

2.1 About the Mastercard Fleet Card Program

The Mastercard Fleet card is part of the Mastercard Corporate Payment Solutions family. The Fleet Card is an extension of the Corporate Purchasing Card and significantly leverages that infrastructure. The Mastercard Fleet Card BIN range is a subset of the Corporate Purchasing Card BIN range. This allows the Fleet Card to behave like a fleet card at petroleum locations, yet function exactly like a purchasing card at all other Card Acceptor Business Code (MCCs). This functionality makes the Mastercard Fleet Card ideally suited for use as a fully featured fleet card or a fleet plus T&E card. Much of the Fleet benefits and functionality are dependent on the BIN range. Therefore, only cards within the Fleet BIN range can leverage fleet card functions.

The Mastercard Fleet card Program encompasses the following card programs:



- Mastercard Corporate Fleet
- Mastercard Corporate Multi
- Mastercard Government Commercial

The Mastercard Fleet card Program does not offer specific merchant discounts, although this does not preclude the issuer from negotiating merchant discounts on behalf of their cardholding customers.

2.2 Cardholder Benefits

There are two types of Mastercard Fleet cards:

- Driver-Assigned

A driver-assigned Mastercard Fleet card is assigned to the driver of vehicle.

- Vehicle-Assigned

A vehicle-assigned Mastercard Fleet card is assigned to a vehicle (rather than a person).

2.2.1 Driver-Assigned Card Benefits

Driver-assigned cards can be issued to enable simplicity for the cardholders, a single program to manage for administration, and most importantly, collects data into a single database utilizing one reporting tool. Many vehicle fleet drivers not only need to pay for vehicle expenses like fuel and maintenance, but also travel expenses such as lodging and meals, etc. General purpose cards like the Mastercard Corporate Fleet Cards are designed to allow different spending controls on different expense categories. Whether an employee has overlapping responsibilities or just needs a single-purpose card, one can be issued that fits their job profile. For example, a local driver only needs fuel and maintenance privileges, while a sales person incurs both fleet and travel expenses.

2.2.2 Vehicle-Assigned Card Benefits

A vehicle-assigned fleet card can also serve as a life-cycle tracking mechanism for all the expenses incurred for a vehicle. These cards remain with the vehicle rather than the driver and will therefore be subject to restrictions in terms of the type of goods and services that can be purchased.

2.3 Mastercard Fleet Specific Features

2.3.1 The Product Restriction Code

This code allows corporate customers the ability to limit what can be purchased at fuel merchant POS locations. This code is intended to reduce the occurrence of unauthorized purchases, but it cannot prevent them. The code is card specific, not fleet specific, meaning that the corporate customer can specify a different code for each card. Issuers or their designated processors are responsible for encoding and personalizing the appropriate values (see section 3.1 and 3.2) on each card as designated by the corporate customer.

2.3.2 The Product Type Code

The Product Type Code allows the corporate customer to select from a list of product options that drive what information is prompted for at the point of sale. The code is card specific, not fleet specific, meaning the corporate customer can specify a different code for each card. The code is interpreted by the terminal to prompt or not prompt for certain data (e.g. odometer reading). Issuers or their designated processors are responsible for encoding and personalizing the appropriate values on each card as designated by the corporate customer (see section 3.1 and 3.2).

2.4 Mastercard Fleet Ancillary Services and Benefits

Mastercard recognizes the value of programs that offer protection and assistance to corporate customers. The Mastercard Fleet Card offers a range of cardholder benefits similar to those offered on the Mastercard Purchasing Card. The following description of benefits represents the Mastercard benefits package. These benefits vary by region and are subject to change at any time, and Issuers should refer to Mastercard bulletins and their Global Commercial Products Relationship Manager for the most current benefits details.

2.4.1 Driver-Assigned Card Benefits

The driver-assigned card carries the same benefits that are offered to Corporate Purchasing Card customers today. The driver-assigned card also carries MasterCoverage®, a program that protects financial institutions and companies from employee misuse of charge privileges.

2.4.2 Vehicle-Assigned Card Benefits

Because the vehicle-assigned card is not issued to a person, it does not carry those types of coverage that are designed for cardholders. With the exception of Master RoadAssist® Roadside Service and Mastercard Global Service® (lost and stolen card reporting, emergency card replacement and emergency cash advance), no other coverage will be available on the vehicle-assigned card. Additionally, MasterCoverage® is not available as a vehicle-assigned card benefit.



2.5 Digital Payments

Mastercard has extensive assets enabling issuers to capitalize on the shift to digital where payment functionality can be embedded in smart connected devices such as mobile phones, telematics devices, on-board systems, etc.

Mastercard enables card credentials to be embedded into digital wallets in a variety of ways thus allowing Fleet stakeholders to build an omni-channel solution leveraging chip security.

Mastercard supports issuers in developing their own converged wallets that can transact in-store, in-app and on-line.

Issuers who wish to enable their card portfolios for third party digital wallets rapidly, with minimal disruption to current operations, can use the Mastercard on-behalf service (Mastercard Digital Enablement Service) which seamlessly:

- Tokenizes and digitizes their cards into the third party digital wallet.
- Validates the token and converts it into the usual card number before authorization requests reach the issuer host.

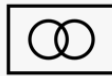
Implementing digital payments brings new challenges but it also brings significant new opportunities. In the longer term, it is expected that digital payments will enable a range of exciting new value-added features and hybrid payment opportunities such as sophisticated loyalty and coupon schemes, GPS alerts, and scanning QR coupons in-store, etc.

3.0 Card Production

The business requirements for the Mastercard Fleet card will impact normal card production in five areas:



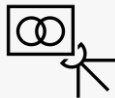
**Magnetic Stripe
Encoding**



Card Design

010101
000111
111100
001100

**Unique BIN
Range**



**Contactless
Technology**



**Chip
Personalization**

3.1 Magnetic Stripe Encoding

Issuers must ensure the magnetic stripe is encoded exactly as it is shown in the Track 1 and Track 2 Data Content and Format section of the Security Rules and Procedures manual. If the contents of certain magnetic stripe fields (that is, Cardholder Name and Discretionary Data) do not fill the amount of space that has been allotted to them, then the unused portion of the fields must be filled with spaces so that each piece of data begins and ends exactly as indicated.

The Product Restriction Code signals to the terminal what product is available for purchase by the cardholder and must always be encoded on Track 1 in position 76 and Track 2 in position 37.

The Product Type Code triggers the terminal to prompt for driver input of specific data. Currently only 5 values are supported in Mastercard Fleet. It must always be encoded on Track 1 in position 77 and Track 2 in position 38. Only the five values below are valid in this field, any other values may cause a decline at the point of sale.

	VALUE	DESCRIPTION
Product Restriction Code	1	Fuel and other products
	2	Fuel only
Product Type Code	1	Prompt for ID # & Odometer
	2	Prompt for Vehicle # & Odometer
	3	Prompt for Driver # & Odometer
	4	Prompt for Odometer Only
	5	No Prompt

3.2 Chip Personalization

3.2.1 Fleet AID

An Application Identifier (AID) is used between the card and the terminal to select the appropriate application to be used to complete the transaction.

When issuing Mastercard Fleet cards on M/Chip they must be issued with a PIX extension in order to identify the fleet product, otherwise they will be treated as a regular Mastercard branded card. Mastercard Fleet cards intended for open-loop use can use either:

- A generic Mastercard AID (i.e. 'A0000000041010' for Mastercard)

OR

- A dedicated AID based on the Mastercard RID, in the following format: 'A000000004ppppFCuuuu', where:
 - pp pp is the PIX for the primary acceptance brand ('1010' for Mastercard)
 - FC is 'FC' (8 bits coded as 11111100b)
 - uuuu is the fuel scheme identifier issued by Mastercard (as part of the implementation project).

Note: Fleet cards intended for use in a closed-loop system should use a dedicated AID based on the Mastercard RID, i.e. 'A000000004xxxx'. xxxx must be different from the existing PIX used by Mastercard ('1010' for Mastercard and '3060' for Maestro).

3.2.2 Cardholder Verification Method (CVM) List

The CVM list personalized in the chip must reflect the requirements of a Driver card or a Vehicle card. In markets where PIN is implemented for Mastercard transactions, a Driver card should support PIN and the PIN should be issued to the cardholder. Vehicle cards do not support signature or PIN, and are accepted with no CVM.

The CVM list used should reflect the requirements of the application and the business requirement identified as specified by the Personalization Data Specifications.

3.2.3 Product Restriction Code

Mastercard Fleet cards allow issuers to control what the driver can purchase via a Product restriction code.

The Fleet Product Restriction Code must be present in the Third Party Data (tag 9F6E). The Third Party Data must be present in the file control information (FCI) in the response to ADF selection.

The Product Restriction Code is also present in the Track 2 Equivalent Data (tag 57) of the chip and the Track 1 Discretionary Data (tag 9F1F) and Track 2 Discretionary Data (tag 9F20) personalized on the chip.

3.2.4 Product Type Code

Mastercard Fleet cards can trigger the standard set of up to five terminal prompts for information, e.g. odometer reading.

The Fleet Product Type Code must be present in the Third Party Data (tag 9F6E). The Third Party Data must be present in the file control information (FCI) in the response to ADF selection.

The Product Type Code is also present in the Track 2 Equivalent Data (tag 57) of the chip and the Track 1 Discretionary Data (tag 9F1F) and Track 2 Discretionary Data (tag 9F20) personalized on the chip.

3.2.5 Vehicle or Driver Number

This field is optional and can be used to indicate a numeric six-digit value representing an identifier of the vehicle or driver.

3.2.6 Fleet Prompt Script File

Mastercard M/Chip applications used for Fleet can use a payment system specific file "Fleet Prompt Script File" for the storage of a prompt file that lists the required prompts and sets the order in which they are to be used. The file can also store static fleet data to be used in authorization. The Fleet Prompt Script File enables the card to contain up to 10 prompts where the information can be used for enhanced authorization decisioning and/or reporting.

Note: Carrying the additional information exchanged by following the Fleet Prompt Script File requires processing over a proprietary network and is currently not supported by Banknet.

3.2.7 Card Type

To enable the distinction between a driver-assigned versus a vehicle-assigned card for the issuer host, the Card Type is present in byte 5 of the Third Party Data (tag 9F6E).

3.2.8 Product Extension Detail

The Product Extension should be present in the Third Party Data (tag 9F6E) and structured as follows:

Byte	Bit	Meaning
1-2		Product Identifier
		Value 0001 assigned to Fleet cards
3		Product Restriction Code
	8-3	Reserved for Future Use
	2	Good for fuel only
4	1	Good for fuel and other products
		Product Type Code
		The Product Type Code for Fleet cards contains the prompt mode. If b8 is set to 1b, then the terminal must use the Fleet Prompt Script File present in the card after processing of the terminal-based prompts.
		The use of terminal-based prompts is indicated by bits 1 to 7 of the Product Type Code field.
		Choice between static terminal-based prompts or dynamic Fleet Prompt Script File usage is left to the decision of the issuer
	8	Use Fleet Prompt Script File
	7-5	Reserved for Future Use
	4	Prompt for Odometer
5	3	Prompt for Driver ID
	2	Prompt for Vehicle Number
	1	Prompt for ID Number
		Card Type
	8	Driver Card
6-8	7	Vehicle Card
	6-1	Reserved for Future Use
		Vehicle or Driver Number
6-8		This field is optional if the Fleet Prompt Script File is not used. If not present, the Proprietary Data Field is limited to 5 bytes in length.
		If the field Prompt Script File is used, then this field must be present, even if used as filler data ('000000') to situate bytes 9 and 10 correctly.
9-10		The field has numeric format (n6).
		Fleet Prompt Script Entry
		This field must be present if bit 8 ('Use Fleet Prompt Script File') of the Product Type Code is set.
		If the Fleet Prompt Script File is used, then this field is present and coded as follows:
		<ul style="list-style-type: none"> Byte 1 (byte 9 of Proprietary Data): Lower bits contain the SFI of the Fleet Prompt Script File: value shall be set to 15 ('0F') Byte 2 (byte 10 of Proprietary Data): Number of records in the Fleet Prompt Script File
	If the Fleet Prompt Script File is not used, then this field is not present.	

3.3 Contactless Technology

Contactless technology can be used with Mastercard Fleet products. However, only EMV-mode transactions are allowed via the contactless interface. Mag-stripe mode contactless fleet transactions must not be supported by the contactless interface as data positions required by contactless mag-stripe mode transactions are already used in the product personalization requirements of these products.

3.4 Card Design

Detailed card design requirements for all Mastercard cards, including Fleet cards, can be found in the *Card Design Standards* manual published on **Mastercard Connect > Publications > Card Design**.

The Mastercard Fleet card design standards are included in this section for convenience only and are in addition to the core Mastercard requirements applicable to all cards. In the event of any conflict between these standards and those in the *Card Design Standards* manual, the *Card Design Standards* manual will take precedence.

Mastercard Fleet cards must have the word "fleet" present on the card front. The corporation's name is optional, but recommended.

The following words are optional on the card front:

- Corporate
- Government
- Public Sector

Vehicle-assigned Fleet cards replace the cardholder name with the word(s) "Plate" or "License Plate" followed by the License Plate Number or the word(s) "Vehicle" or "Vehicle ID" or "Vehicle #" followed by the Unique Vehicle Number that has been assigned to the vehicle by the issuer or corporate customer (e.g., "PLATE ABC 123 NY" or "VEHICLE 123456"). The issuer or corporate customer can choose another phrase when appropriate (for example, "Vessel #" or "Tail #").

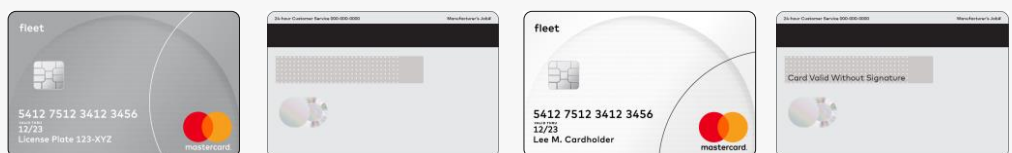
As vehicle-assigned cards are not assigned to a person and therefore there is no cardholder to sign their name in the signature panel, either:

- "Card Valid Without Signature" must be unembossed printed on the signature panel
- The signature panel is replaced with artwork simulating a signature panel with "Card Valid Without signature". Issuers can use the Mastercard version of this artwork or create their own
- The signature panel may be omitted

As vehicle-assigned cards are limited to specific merchant categories (e.g., gas stations, tire and battery merchants, etc.) Mastercard recommends phrases including, but not limited to the following appear on the card front as a reminder of the card's limited use:

- Fuel & Maintenance Only
- Fuel Only
- Maintenance LOCATIONS Only
- Fuel & Maintenance Locations Only

Here are examples of approved artwork for the front and back of a Mastercard Fleet card product.



3.5 Unique Corporate Fleet Card BIN Range

Unique BIN ranges have been assigned to the Mastercard Fleet card Program. The BIN ranges reserved for the Corporate Fleet Card include the following qualifying Fleet BIN ranges:

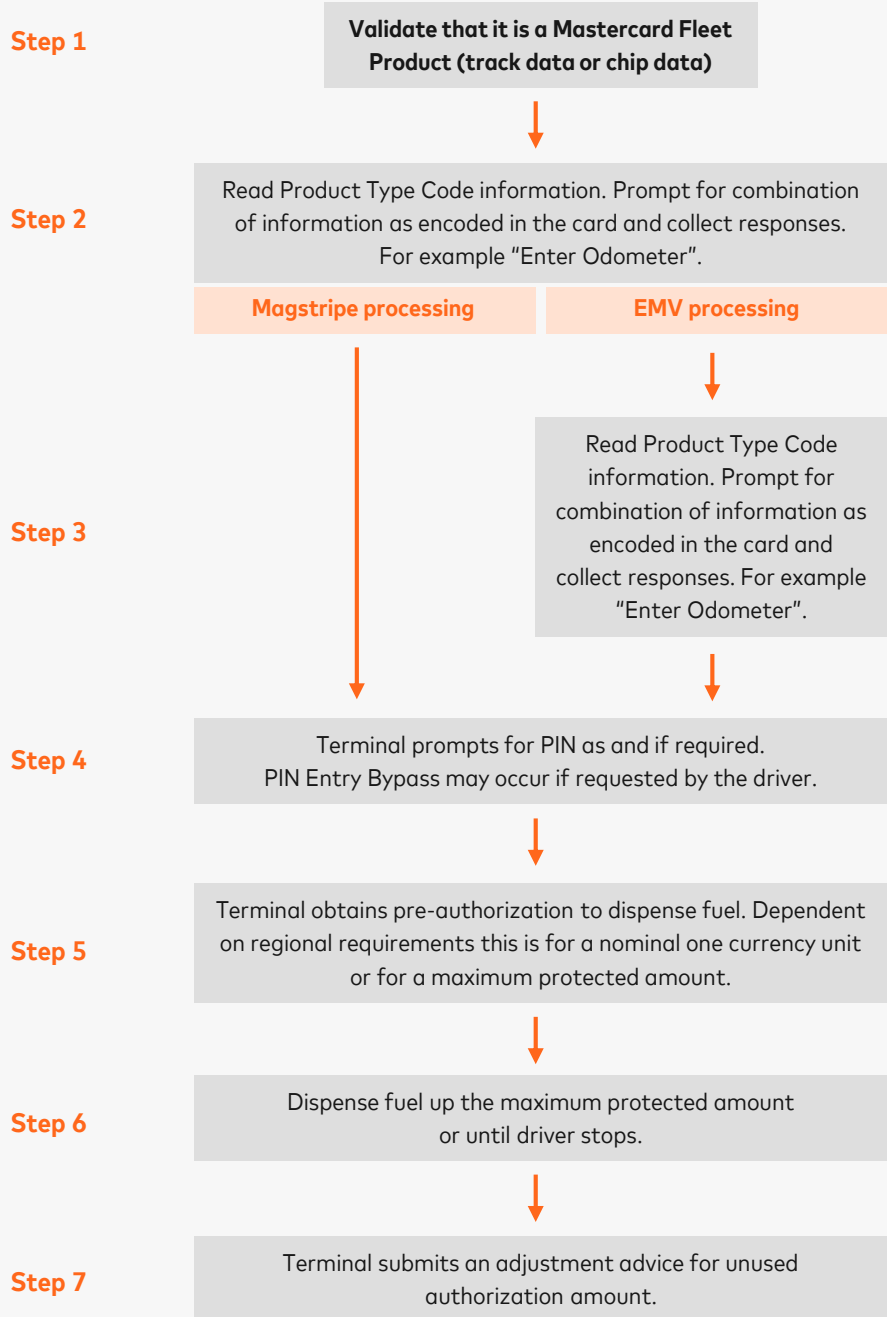
- 553231 to 553380**
- 556083 to 556099**
- 556100 to 556599**
- 556700 to 556999**

Fleet	MultiCard	Government Commercial Card
556083 through 556299	556500 through 556599 (used only for programs where the cards will be encoded with Product Type Code = 5 No Prompts)	556500 through 556599
556400 through 556499	556300 through 556399	556800 through 556899
556700 through 556799	556900 through 556999	

Issuers must be assigned a BIN by Mastercard prior to issuing this product.

4.0 Mastercard Fleet Terminal Processing

Terminals must read and act upon the Product Type Code encoded in Track 1 or 2 and personalized in the chip data of Mastercard Fleet cards. This means that they will prompt for certain fleet specific data. Terminals accepting the enhanced Mastercard M/Chip Fleet prompting may also read and act on the card specific prompts personalized in the chip. A simplified terminal processing at a Mastercard Fleet acceptance location is illustrated below:



5.0 Liability, Restrictions, and Disclosure Regarding Chargebacks

Mastercard offers issuers the flexibility to issue Mastercard Corporate Fleet Cards to drivers or to vehicles. Issuance of the vehicle-assigned card is at the full discretion of the issuing bank and, therefore, the issuer must assume any increased liability that results from use of the vehicle-assigned card.

5.1 Fraud Related Chargebacks

5.1.1 Vehicle-Assigned Cards

Vehicle-assigned cards are assigned to vehicles, not individuals, and as such, no signature is required on the back of the card and no PIN is required on the Chip. Because there is no verification method e.g. signature on the back of the vehicle-assigned card, merchants will not have the ability to verify whether the customer is authorized to use the card by comparing signatures. Issuers must assume liability for fraudulent transactions that occur due to a lack of signature or PIN and, therefore, chargebacks for Reason Code 4837 (No Cardholder Authorization) related to lack of customer verification will not be permitted for transactions performed with vehicle-assigned cards.

Issuers of the vehicle-assigned card must also agree to limit use of the card by MCC to fuel and maintenance locations only. Applicable MCCs are listed in Appendix D of this document.

5.1.2 Driver-Assigned Cards

Driver-assigned cards follow standard chargeback procedures and are therefore verified by either signature or PIN. Please see the Mastercard Chargeback Guide for detailed information regarding driver-assigned cards liability, restrictions, and disclosures.

5.2 Authorization Related Chargebacks

Automated Fuel Dispenser (MCC 5542). The issuer cannot charge back an automated fuel dispenser transaction effected in the U.S. region with:

- A Mastercard Corporate Card®, Mastercard Corporate Executive Card®, Mastercard Corporate Fleet Card®, or Mastercard Corporate Purchasing Card™ for any amount less than or equal to USD 150, when the transaction was identified in the authorization request with MCC 5542 (Fuel Dispenser, Automated) and CAT 2, and authorized by the issuer for USD 1. When the transaction amount exceeds USD 150, the issuer may charge back only the difference between the transaction amount and USD 150.
- Any other Mastercard card for any amount less than or equal to USD 100, when the transaction was identified in the authorization request with MCC 5542 (Fuel Dispenser, Automated) and CAT 2, and authorized by the issuer for USD 1.
 - When the transaction amount exceeds USD 100, the issuer may charge back only the difference between the transaction amount and USD 100.

5.3 Chip Liability Shift

Mastercard previously announced that U.S. region AFD merchant locations identified with card acceptor business code (MCC) 5542 (Fuel Dispenser, Automated) will participate in the U.S. region domestic chip and chip/PIN liability shifts and join the Global Chip Liability Shift Program for interregional transactions as of October 1, 2017.

To provide additional time for this merchant sector to migrate to EMV chip technology, Mastercard is delaying the participation date for U.S. region AFD merchants to October 1 2020, when the merchant accepts a card issued in the U.S. region. The participation date will remain October 1, 2017 with respect to the acceptance of cards issued outside of the U.S. region.

In an effort to minimize fraud exposure in the payments ecosystem during the liability shift extension period, fuel merchants will continue to be evaluated in accordance with the guidelines of the Mastercard Excessive Chargeback Program (ECP). A fuel merchant that is identified in ECP as an Excessive Chargeback Merchant (ECM)² will be required to implement the Address Verification Service (AVS) within 60 days of the ECM identification. This requirement will remain in place until the merchant is no longer identified as an ECM for three consecutive months. Additional details about the AVS requirement will be published in a future U.S. Region Operations Bulletin.

For more information about the Mastercard ECP, see section 8.3 of the Security Rules and Procedures.

For more information about the counterfeit and lost/stolen/NRI chip liability shifts, refer to dual message reason codes 4870 (Chip Liability Shift) and 4871 (Chip/PIN Liability Shift) and single message reason code 70 (Chip Liability Shift) in the Chargeback Guide.

6.0 Authorization

An issuer provides a wide range of authorization controls that can limit or restrict cardholder use of the card. These controls can be either performed by the EMV card itself or the issuer's host. The upper range of these limits is generally set by the organization/company based on the specific requirements.

An issuer can place the following authorization controls as desired and can also setup some of them on the card to allow for decisions at the POS/AFD:

- Maximum Transaction Amount
- Number of Transactions
- Card Usage by MCC
- Transaction Amount Limits by MCC or Other
- No Usage at ATM Transactions
- Additional Limits (Budget Periods, Time-Based Authorizations, etc.)

Details on the personalization of the chip can be found in the *M/Chip Requirements for Contact and Contactless* and the *M/Chip Personalization Data Specifications for Contact and Contactless Manuals*.

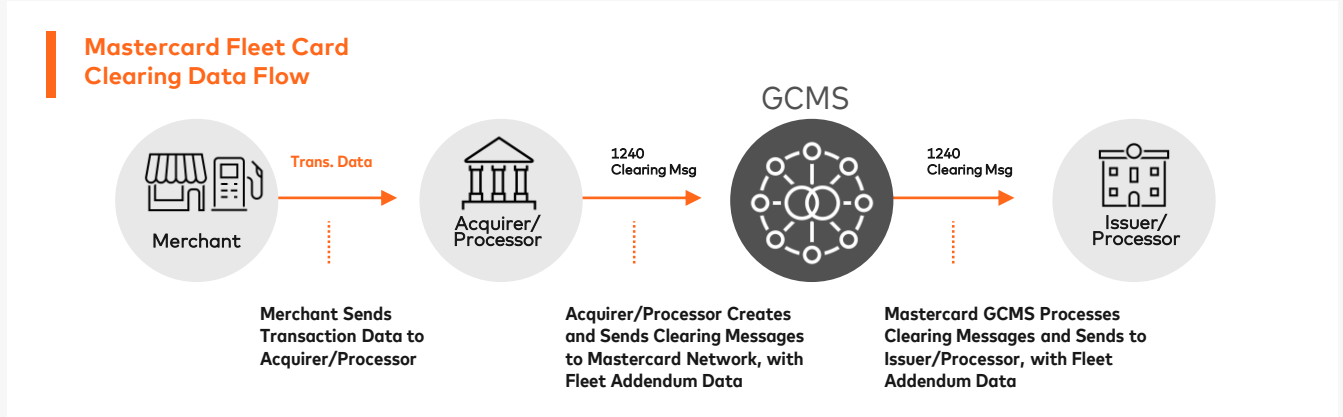
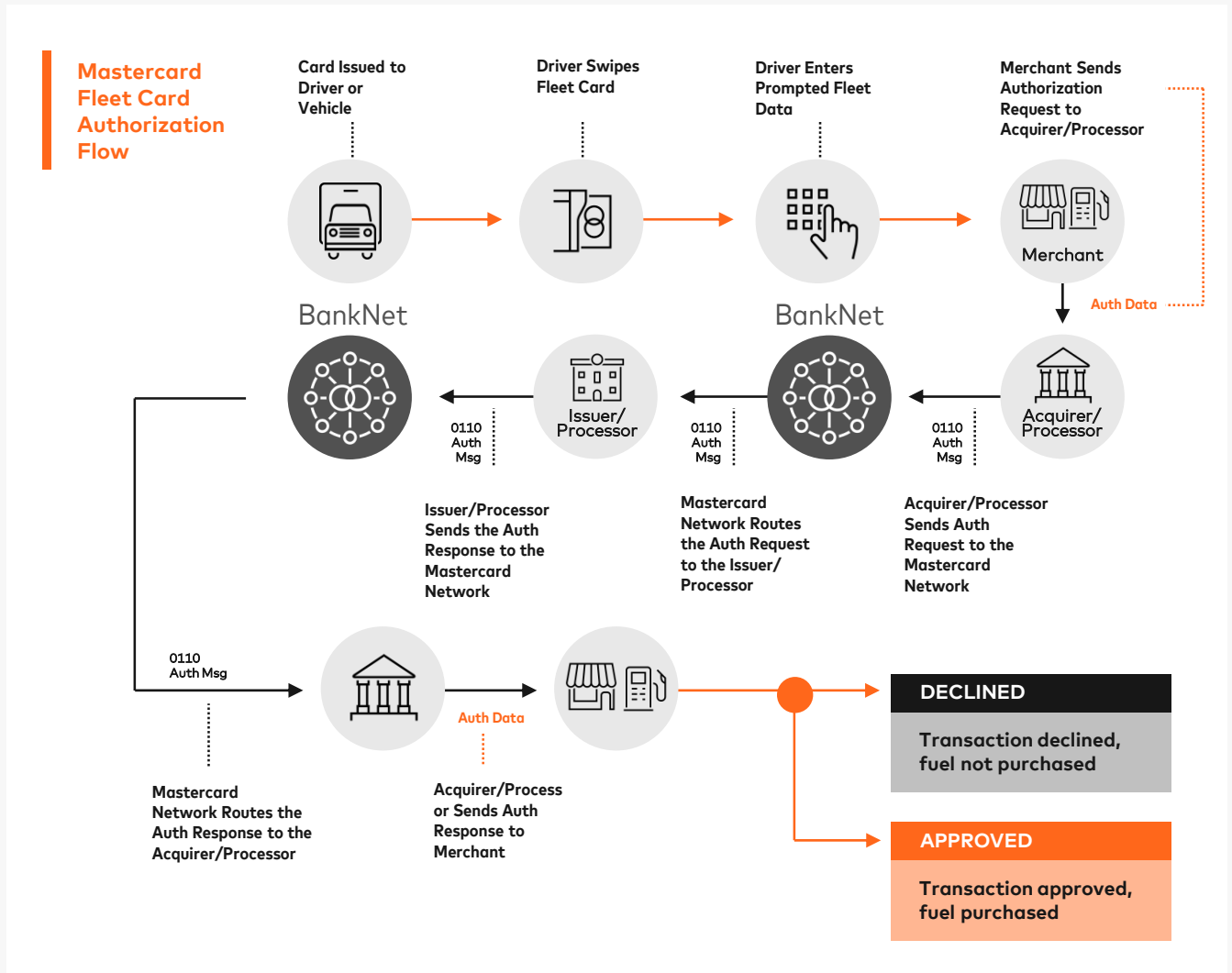
6.1 Authorization Request

All electronically authorized Mastercard Fleet card transactions will be initiated by using the Message Type 0100 Authorization Request. This is the same record currently being used for all Mastercard transactions.



6.2 Standard Transaction Flow

Mastercard Fleet card transactions will be routed for authorization and clearing purposes through the infrastructure in place to support Mastercard transactions:



6.3 Additional Authorization Criteria

The Mastercard Fleet card accommodates the authorization of additional data that will allow the corporate customer to verify the user of the card and will enable more detailed reporting. The presence or absence of these values is dependent on the Product Type Code in the magnetic stripe and can vary by card and by fleet. These fields are identified as follows:

ID Number	0100 Authorization Request	DE 48, SE 98
Driver Number	0100 Authorization Request	DE 48, SE 98
Vehicle Number	0100 Authorization Request	DE 48, SE 99

Although it may be prompted for at the point of sale, the Odometer is not included in the authorization message.

Where the magnetic stripe and chip are unreadable, the terminal will default to prompting for ID Number and Odometer.

Not every fuel location will provide enhanced data in the authorization message. Moreover, this data will not be present in the DE55 of the chip transactions since the tag 9F6E is not one of the mandatory EMV tags in the message.

However, all EMV-enabled terminals in the U.S. that support fleet cards must use the Fleet Product Extension Data (if present) in tag 9F6E to drive the special processing requirements applicable to the product. In case the Fleet Product Extension is not present, terminals must use the legacy magnetic stripe-based product information.

The Issuer will have to determine if they wish to authorize the transaction without the additional data in these cases. Issuers should be aware that there will be cases when a Driver, Vehicle, or ID Number is not available to be sent in the 0100 authorization message. This will occur whenever a Mastercard Fleet card is used at a location that has not made changes at the point of sale to prompt cardholders for additional information. This may also occur when a Merchant's terminal is down or an Issuer/Processor's authorization system is down. When a Merchant's terminal is down, the Merchant may seek authorization by calling the Acquirer's authorization center or help desk. In these cases, the Acquirer will follow standard call-in practice, and the transaction will be checked against available criteria. When an Issuer/Processor's system is down, the transaction will go to stand-in authorization and will be checked against previously stipulated criteria.

Once the transaction is completed, if processed via the dual message system, the Acquirer must send an authorization advice request message (0120) for the full dispense amount. The message must be sent within 60 minutes of the original authorization request and must include in DE 48, subfield 63 the Trace ID value of DE 63 from the authorization response message. The authorization advice request message must contain the chip data from the original authorization (see RA188.13). For single message processing, a 0420 message must be sent (see Transaction Processing Rules).

6.4 Authorization Database

6.4.1 Number Types

The Vehicle Number and ID Number are typically associated with a driver-assigned card, while the Driver Number is typically associated with the vehicle-assigned card.

6.4.2 Authorization of Numbers

For the purposes of authorizing Driver, Vehicle, or ID Numbers, only one of these numbers will be passed from the point of sale. The Driver, Vehicle, or ID Number that is presented for authorization must be checked against the database and approved when there is a positive match and when other authorization criteria are met. Because a single driver (driver-assigned card) may be authorized to use one or more vehicles in the fleet, or a vehicle may have multiple valid drivers, Issuers must set up authorization systems to validate multiple Driver or Vehicle Numbers for each card.

6.4.3 Different Authorization Levels

Issuers may also wish to further differentiate their product by allowing for different levels of authorization. Rather than allowing all valid Vehicle Numbers to authorize any driver's card and vice versa, the Issuer could restrict certain cards to only a portion of available Vehicle Numbers. For example, a customer may wish to allow drivers in the sales department to use any vehicle in the sales vehicle pool, while restricting drivers from other departments from using vehicles assigned to the sales department.

6.5 Authorization Response Record and Messaging

A standard 0110 authorization response record will be returned to the POS (point of sale) Processor by Mastercard. This record will contain the appropriate response code to the 0100 authorization request.

When Issuers choose to decline a transaction due to an invalid Driver, Vehicle, or ID Number, Issuers are required to provide additional data in the 0110 authorization response message to convey this information to the point of sale. Additional data in support of the response messages, such as "Invalid Driver Number" and "Invalid Vehicle Number", are further defined on pages 26-27.

6.6 Use of Response Messages

6.6.1 Approved Transactions

All authorization requests are routed to the Issuer (or Issuer/Processor) through the 0100 authorization request message. Upon receipt of the authorization request, the Issuer will attempt to authorize the transaction by validating the request against the Issuer's authorization criteria. If the transaction is approved, the Issuer will respond through the 0110 authorization response message by inserting a two-digit response code corresponding to approval. The value of the response code is as specified in Table 3.

6.6.2 Declined Transactions

To decline a transaction, the Issuer will respond through the 0110 authorization response message as described above, except that the value of the two-digit response code will vary depending on the reason for decline. For Fleet transactions, Mastercard has created reason-specific decline messages to enhance communication and minimize confusion at the point of sale. If the transaction cannot be authorized because of an invalid ID Number, Driver Number, or Vehicle Number, then the transaction shall be declined using the values in Tables 3 and 4 below. The existing authorization message process (logic) shall be used in all other instances where a transaction cannot be authorized.

Use of the additional response codes for invalid ID, Driver, and Vehicle Number will occur through the following process. When the Issuer determines that the ID, Driver, or Vehicle Number is invalid, causing the transaction not to process, the response code value "12" ("Invalid Transaction") shall be returned in DE 39 Response Code. The specific reason for decline (error) shall be returned in DE 44 Additional Response Data using the values shown in Table 4 (created for the Fleet Program).

Acquirers are responsible for interpreting these values and displaying the appropriate message on the authorization terminal. Therefore, when the value is a "12", the Acquirer must also refer to the Additional Response Data field to interpret the specific reason for decline. Since the decline reason code 12 may be used for reasons other than Invalid Driver, Vehicle, or ID Number, the Acquirer should be aware that there will not always be data present in the Additional Response Data field.

Upon receipt of the 0110 authorization response message, the POS Processor shall interpret the response code and display the response message corresponding to the response code on the authorization terminal display. Response messages may be truncated as necessary to the number of characters that can fit on the authorization terminal display.



6.6.3 Data Capture of Prompted Information

To complete the Financial Detail Addendum (Corporate Fleet Transaction Information)/1644 message, the Acquirer needs to capture the Driver, Vehicle, or ID Number being sent in the 0100 authorization request message.

Table 3: 0110 Authorization Response – DE39

Response Code Value	Action	Response Message
00	Approve	Approved
05	Decline	Do not honor
12	Decline	Invalid transaction

The information above is a partial list of the standard response codes. A complete listing of all Mastercard standard response codes can be found in the Customer Interface Specification (CIS) manual.

Table 4: Specific Reason for Decline – 0110 Authorization Response – DE44 (created for Fleet card product)

Additional Response Data Value	Action	Response Message
01	Decline	Invalid ID Number
02	Decline	Invalid Driver Number
03	Decline	Invalid Vehicle Number

6.7 Other Authorization Considerations

6.7.1 CAT Pre-Authorization

At U.S. gas pumps, transactions can be pre-authorized for \$1.00 and drivers may purchase up to \$150.00 without being exposed to Reason Code 4808 (Transaction Not Authorized). Because some larger vehicles may have the tank capacity, it is possible that these vehicles may require two or more fuel purchase transactions in order to fill their tanks. Issuers must be aware that in some cases back-to-back transactions may be required to fill the tank and authorization criteria (e.g., velocity limits) should not interfere in these situations.

In other countries, the full amount of the transaction must be authorized to avoid chargeback exposure under Reason Code 4808 (Transaction Not Authorized). As such, this typically involves a pre-defined authorization amount, which is also used as a limit for the pump to be shut off.

6.7.2 MCC Blocking – Selected Acceptance

To enable the corporate customer to customize the allowable types of purchasing on the Mastercard Fleet Card program, issuers must provide the ability to block authorization by MCC.

6.7.3 Fleet MCC Blocking Requirements

At a minimum, all Fleet cards must offer acceptance at the fuel MCCs of 5541, 5542, and 5499. In addition, maintenance MCCs (listed further below) can be offered. However, if used as a fleet card only, the implication is that the fleet customer desires acceptance at traditional gasoline stations, convenience stores that sell motor fuel. In such cases, acceptance of the Corporate Fleet Card should include the five specific MCCs that Mastercard has designated as fuel location MCCs:

4468	Marinas, Marine Service/Supplies
5499	Miscellaneous Food Stores – Convenience Stores, Markets, and Specialty Stores
5541	Service Stations (with or without Ancillary Services)
5542	Fuel Dispenser, Automated
5983	Fuel Dealers – Coal, Fuel Oil, Liquefied Petroleum, Wood

All other MCCs should be blocked by the issuer. When this blocking is done, the issuer should be aware that any transaction that occurs outside of these five MCCs will be declined.

Mastercard is aware that the MCC coding throughout the industry has not been implemented without error and in some cases; fuel locations may be assigned incorrect MCCs. One likely error is the coding of fuel locations as convenience stores (MCC 5499). Because it is expected that the majority of Fleet card transactions that take place at convenience stores will be legitimate fuel transactions, Mastercard has designated MCC 5499 as a fuel location MCC. Offering acceptance at 5499 will avoid the unintentional decline of these legitimate fuel transactions, thus increasing customer convenience and adding value to the card.

Mastercard has defined these five MCCs (4468, 5499, 5541, 5542, 5983) as “Fuel Location” MCCs. This means that for interchange and editing purposes, these five MCCs will fall under the rules defined for the Corporate Fleet Card transactions at fuel locations. GCMS edits have been implemented to insure the correct commercial addendum data is provided to qualify the transactions for incentive interchange rates. This editing will apply to all Mastercard Fleet Card and Multi Card transactions (all transactions within the fleet BIN range).

If the corporate customer wishes to enable the card for maintenance purchases, all of the maintenance location MCCs listed below must be available.

5013	Motor Vehicle Supplies and New Parts
5511	Automobile and Truck Dealers – Sales, Service, Repairs, Parts, and Leasing
5531	Auto Store, Home Supply Stores
5532	Automotive Tire Stores
5533	Automotive Parts, Accessories Stores
5599	Miscellaneous Automotive, Aircraft, and Farm Equipment Dealers – not elsewhere classified
7531	Automotive Body Repair Shops
7534	Tire Retreading and Repair Shops
7535	Automotive Paint Shops
7538	Automotive Service Shops
7542	Car Washes
7549	Towing Services
7692	Welding Repair
7699	Miscellaneous Repair Shops and Related Services

The maintenance and fuel location MCCs may be available to the vehicle-assigned card at the discretion of the corporate customer. No other MCCs may be allowed for the vehicle-assigned card.

6.7.4 X-Code Processing (Stand-in at the MIP)

When the acquirer host cannot communicate with the acquirer MIP or the acquirer MIP cannot communicate with the Mastercard Network for authorization, the X-Code process determines the default purchase amount at which transactions are authorized. The X-Code purchase limit for the Mastercard Fleet card and Multi Card is set at \$600. This is the same X-Code policy that is in effect for the Purchasing Card. For transactions outside the U.S., the authorization amount in local currency would be converted to US dollars to determine the current exchange rate and then the limit applied.

7.0 Chip On-Behalf Services

Introducing chip technology means upgrades to the host system to support, validate and utilize new data. Mastercard offers an on-behalf service that removes the need for an immediate upgrade to the issuer host.

Mastercard makes a range of on-behalf services available to issuers:

1. Chip to Magstripe Conversion Service; this removes any chip related data from the authorization request/0100 message and sends as a pure magstripe transaction.
2. Chip Validation Service; this authenticates the authorization cryptogram and additional chip data (CVR & TVR) on behalf of the issuer and generates the issuer authentication data (containing the ARPC and appropriate response code), which is then sent to the M/Chip card in the authorization response/0110 message.
3. Chip CVC to CVC1 Service; this service replaces the unique chip-specific CVC with a CVC1 in magstripe format in the authorization request/0100 message before passing it to the issuer host.

By combining the above services, a Mastercard Fleet issuer can migrate to M/Chip with minimal impact to its authorization host system. Where the fleet transactions are routed via a proprietary network, utilizing the services requires integration between the issuer host system and the Mastercard On-Behalf Services.

8.0 Recommended Data Elements for Reporting

FIELD NAME	DIGITS	DESCRIPTION
Account Number	Up to 19 Numeric	Card account number (assigned to individual or to vehicle).
Average Cost per Mile	4 Numeric	Total dollars spent on fuel (sum of fuel transaction amounts) divided by total miles traveled (final odometer reading minus beginning odometer reading). This is calculated for a specific period (e.g., YTD, MTD).
Average Miles per Gallon	4 Numeric	Calculated for a specific period (e.g., YTD, MTD) by dividing total miles driven in a period by total gallons of fuel purchased in that period.
Cost per Mile	4 Numeric	Applies to fuel transactions only. Calculated for a specific transaction by dividing the fuel transaction cost by the number of miles driven since the last fueling. Can be calculated for a specific period (e.g., YTD, MTD) by dividing total cost of fuel in that period by total miles driven in a period.
D	1 Alpha-Numeric	Used for exception reporting. Indicates that transaction took place at a fuel location that does not provide enhanced data. Can be identified by the absence of a Fleet 1644 Record from a Fleet/Fuel MCC: 4468, 5499, 5541, 5542, 5983, 7511, and 9752.
Date	8 Digits	Transaction date of purchase displayed in MM/DD/YY format.
Driver Name	25 Alpha	Cardholder name assigned to card account number.
Driver/ID Number	17 Numeric	Only six characters will be used in the U.S. Although the field is alpha-numeric in the 1644, only numeric numbers may be assigned. 17 digits have been set aside to accommodate international. Specific number assigned by corporate customer to drivers. Driver number is entered at POS if product type code is 3 on the magnetic stripe. ID number is entered at POS if product type code is 1 on the magnetic stripe.
Driver License Number	20 Alpha-Numeric	License number to correspond to each driver. Provided at corporate customer's discretion.
Driver License Expiration Date	8 Digits	Used for drivers only. Expiration date of driver license in MM/DD/YY format (included at the discretion of the corporate customer).

FIELD NAME	DIGITS	DESCRIPTION
Exceptions	3 Alpha	Indicates whether and what type of exception(s) were recorded for a specific transaction or reporting period. See note 7
F	1 Numeric	Used for exception reporting to indicate unauthorized use of full service. Authorization to use full service must be provided by corporate customer. Received in 1644 Record in Motor Fuel Service Type field as 1=self service; 2=full service.
Fuel Product	3 Numeric	Indicates fuel product purchased, corresponding to Product Code Conversion Table. Possible values 001-029 and 100-203.
HG	2 Numeric	Used for exception reporting. Indicates that a high grade of fuel was purchased. High grades correspond to Product Code Conversion Table values 002-004, 006-008, 020-022, 025.
Location	30 Alpha-Numeric	City and state in which transaction occurred.
M	1 Alpha-Numeric	Exception code for multiple fueling in one day.
MPG		Exception code used to identify MPG fluctuations of 25% or more between transactions. Calculated by subtracting previous MPG from current MPG and dividing remainder by previous MPG. Transaction is exception if equation result is more than 0.25.
Maintenance Purchased	3 Numeric	Type of maintenance purchased, corresponding to Product Code Conversion Table. Possible values 030-046, 300-317, and 350.
Maximum Fill-Up	1 Numeric	Maximum number of fuel purchases allowed over a specific period of time (e.g., one day, two days) for a specific vehicle. Used for exception checking. Provided by corporate customer. See note 5.
Maximum Unit Price	5 Numeric	Maximum unit price allowed in format xx.xxx. Used for exception checking. Provided by corporate customer. See note 5.
Maximum Transaction Amount	9 Numeric	Maximum amount for a transaction in format x,xxx,xxx.xx. Used for exception checking. Provided by corporate customer. Can support limits at multiple reporting levels. See note 5.
Maximum Monthly Units	7 Numeric	Maximum monthly units allowed in format xx,xxx.xx. Used for exception checking. Provided by corporate customer. Can support limits at multiple reporting levels. See note 5.
Maximum Monthly Cost	9 Numeric	Maximum monthly spending allowed in format x,xxx,xxx.xx. Used for exception checking. Provided by corporate customer. Can support limits at multiple reporting levels. See note 5.

FIELDNAME	DIGITS	DESCRIPTION
MilesDriven	6 Numeric	Calculated by subtracting previous odometer reading from current odometer reading. Can be calculated for a specific transaction or for a longer period by subtracting first odometer reading of period from last odometer reading of period.
Miles per Gallon	4 Numeric	Applies to motor fuel transactions only. Calculated value by subtracting previous odometer reading from current odometer reading and dividing remainder by number of gallons purchased. MPG can be calculated as an average for a period by dividing total miles driven in the period by total gallons purchased in the period.
Miles per Gallon (max.)	3 Numeric	Maximum miles per gallon for a specific vehicle. Used for exception checking.
Miles per Gallon (min.)	3 Numeric	Minimum miles per gallon for a specific vehicle. Used for exception checking.
Non-Fuel Description	12 Alpha-Numeric	Abbreviated description of non-fuel product(s) purchased. Corresponds to codes 030-046,070,078 -83, 089,099, 300-317 and 350 of the Product Code Table.
NF	2 Numeric	For cards restricted to "fuel only." Exception code used to identify any non-fuel transactions. Can be identified by the receipt of a non-fuel product code-in the Financial Detail Addendum (Corporate Line Item Detail) 1644 message.

FIELDNAME	DIGITS	DESCRIPTION
Odometer Reading	7 Numeric	Reading from odometer entered by cardholder.
Oil Organization/ Company Brand	4 Numeric	4-digit code used to identify specific brand of fuel purchased. Received in Oil Organization/Company Brand Name Field of the Financial Detail Addendum (Corporate Line Item Detail) 1644 message. Corresponds to Oil Organization/Company Brand/Chain Identifier Table.
P		Exception code used to indicate that price per gallon of fuel exceeds corporate limit. Exception occurs when Unit Price exceeds Maximum Unit Price.
Plate	15 Alpha-Numeric	Used for vehicles only. License plate number associated with vehicle.
Plate Expiration Date	8 Digits	Used for vehicles only. Expiration date of license plate in MM/DD/YY format.
Price per Unit Volume	4 Alpha	Price per unit volume of fuel purchased.
Product Abbreviation	12 Alpha	Short description of product associated with transaction. Product names must be translated from the product codes received from oil companies.
Product	35 Alpha-Numeric	Long description of product.
Reporting Area/ Breakdown	25 Alpha-Numeric	Reporting level (e.g., geographic region, department, organization/company, etc.) identifier. A minimum of three levels of reporting must be supported.
Service Type	1 Numeric	1 = self service; 2 = full service and 3 = only non-fuel products being purchased.
State	2 Alpha	State in which transaction takes place.
Tank Capacity	3 Numeric	Maximum number of fuel units that a vehicle can hold. Used for exception checking for a specific vehicle.
Time	5 Numeric	Transaction time of purchase displayed in HH:MM format, using military time.
Time (Beginning)	5 Numeric	Beginning time of authorized fueling period for a specific driver or vehicle. Transactions taking place outside of Time (Beginning) and Time (Ending) are considered exceptions. Exception times provided by corporate customers.

FIELDNAME	DIGITS	DESCRIPTION
Time (Ending)	5 Numeric	Ending time of authorized fueling period for a specific driver or vehicle. Transactions taking place outside of Time (Beginning) and Time (Ending) are considered exceptions. Exception times provided by corporate customers.
Total Fuel Cost	5 Numeric	Total cost of fuel for a given transaction and period (may be month, month to date, year to date, or billing period).
Total Non-Fuel Cost	6 Numeric	Total cost of non-fuel purchases for a given transaction and period (may be month, month to date, year to date, or billing period). (See Note 3).
Transaction Amount	9 Numeric	Total amount of transaction.
Unit Cost	9 Numeric	For fuel transactions, unit cost received as Motor Fuel Unit price in the Financial Detail Addendum (Corporate Line Item Detail) 1644 message. For non-fuel transactions, unit cost derived by dividing Extended Item Amount in the Financial Detail Addendum (Corporate Line Item Detail) 1644 message by Item Quantity.
Units	5 Numeric	Number of units purchased displayed in xxx.xx format. Units are typically associated with gallons purchased to calculate MPG and cost per mile. Received as "Motor Fuel Quantity" of the Financial Detail Addendum (Corporate Line Item Detail) 1644 message.
V		Exception code used when a vehicle in a corporate fleet has not fueled for an entire reporting period.
Vehicle Description	25 Alphanumeric	Description of vehicle associated with card number.
Vehicle Number	17 Numeric	Only six characters will be used in the U.S. Although the field is alphanumeric in the 1644 message, only numeric numbers may be assigned. 17 digits have been set aside to accommodate international standards for future expansion. Corporate user assigned vehicle identifier, entered by driver if product type code is 2 on the magnetic stripe. If the card is assigned to a vehicle, then Vehicle Number may be provided by the corporate customer at the time of account opening (if not provided by corporate customer, it may be issuer assigned).
Vehicle Registration Expiration Date	8 Numeric	Date of vehicle's registration expiration in MM/DD/YY format.

FIELD NAME	DIGITS	DESCRIPTION
Vehicle Identification Number (VIN)	17 Alpha-Numeric	Official vehicle identification number (not Vehicle Number) used for purposes of insurance, legal matters, etc.
WE	1 Numeric	Used to flag weekend purchases as exceptions per request of corporate customer. 1 = Purchases allowed on weekdays only; 2 = Purchases allowed on Monday - Saturday; 3 = Purchases allowed on all days except holidays (holidays based on official Mastercard holiday list); 4 = Purchases allowed on all days except Sundays and holidays (holidays based on official Mastercard holiday list); 5 = Purchases allowed on all days. Also used when fueling time occurs within the Time (Beginning) and Time (Ending) exception period.

NOTES:

1. Minimum of three levels of fleet reporting (e.g., driver, department, area, region, company) must be supported. Issuers may wish to differentiate themselves by supporting more levels. Three common levels of reporting might include:
 - 1) Account, Vehicle, Driver reports
 - 2) Geographic region or organizational area
 - 3) Company
2. All individual card account numbers should be flagged to link individual cards with an umbrella corporate account.
3. Issuers may wish to differentiate themselves further by reporting total expenses related to Fuel, Maintenance, and Other. Automotive maintenance can be identified by using the Product Code Conversion Table (see Appendix A). Values of 030-046 on the table relate to automotive maintenance.

4. On Fleet products, Exception Reports will be generated when transactions fall within the exception criteria as defined by Mastercard, the issuing bank, and the corporate customer.
 - Database fields must be structured so that the corporate customer-defined exception parameters can be supported and transactions falling outside those parameters can be flagged for exception reports (i.e., customers should decide: on which days and at which times transactions will be considered exceptions for which cards; what price per gallon is too high; how often fueling should occur in a given period of time, etc.).
 - Mastercard has defined certain exceptions listed below:

Exception Code	Definition	Exception Code	Definition
HG	PLUS or SUPER grade fuel purchased	NF	Non-fuel purchase
F	Full-service fueling	P	Price per gallon exceeds limit
D	No enhanced data available	V	Vehicle not fueling for an entire reporting period
MPG	MPG fluctuates + 25% since last purchase	WE	Weekend/evening/holiday purchase
M	Multiple service/Fill-up per day		

5. The Corporate Fleet card supports the entire range of Purchasing Card authorization options, including dollar limits per transaction and limits on the number of transactions allowed in a specific period of time (velocity limits). However, Issuers should be aware that fuel locations generally operate in a post-pay environment (i.e., fuel is pumped before a form of payment is presented). Accordingly, Issuers may not wish to decline transactions that violate limits on velocity or dollars per transaction, as this will cause confusion at the point of sale. Instead, Issuers may wish to authorize transactions that exceed these limits and flag these violations as exceptions on the fleet analysis reports.



8.1 ID Numbers

Cardholders may be prompted to enter an ID Number. This number is typically assigned by the corporate customer, but may also be assigned by the Issuer. The Issuer will authorize this number (see Section 6.3) and will use the ID Number to create the reports that have been requested by the corporate customer. Therefore, the Processor's systems must be designed to associate ID Numbers with all transaction activity. The list of current ID Numbers will change as a corporate customer's driver base changes, requiring the population of ID Numbers in the database to be updated frequently.



8.2 Vehicle Numbers

Users of driver-assigned cards may be prompted to enter a Vehicle Number. The Vehicle Number will generally be assigned by the corporate customer. If the corporate customer assigns a Vehicle Number, the Issuer/Processor will authorize this number (see Section 6.3) and will use the Vehicle Number to create the reports that have been requested by the corporate customer. Therefore, the Processor's systems must be designed to associate Vehicle Numbers with all transaction activity. The list of authorized Vehicle Numbers will change as a corporate customer's vehicle base changes, requiring the population of Vehicle Numbers in the database to be updated frequently.



8.3 Driver Numbers

Users of vehicle-assigned cards will be prompted to enter a Driver Number. The Driver Number will generally be assigned by the corporate customer. If the corporate customer assigns a Driver Number, the Issuer/Processor will validate this number (see Section 6.3) and will use the Driver Number to create any reports that have been requested by the corporate customer. Therefore, the Processor's systems should be designed to associate Driver Numbers with all transaction activity. The list of current, authorized Driver Numbers will change as a corporate customer's driver base changes, requiring the population of Driver Numbers in the database to be updated frequently.

9.0 Reports

To create reports, Issuers should receive a Financial Detail Addendum (Corporate Fleet Transaction Information)/1644 message with each fleet transaction from participating locations. Some Merchants will not prompt for any enhanced driver data, but will create and send addendum messages that contain motor fuel information detail for fuel purchases (e.g., oil company brand name, motor fuel service type, fuel type, fuel quantity, unit price, etc.) and non-fuel product information detail for non-fuel items purchased (e.g., product code, item description, quantity, etc.).

The Issuer may receive a Corporate Fleet Transaction Information/1644 addendum message that does not include a Driver Number, ID Number, or Vehicle Number because the cardholder has the ability to enter past the prompts or because the cardholder was not prompted for enhanced driver data.

9.1 Reports Developed by the Issuer/Processor

Fleet reports must be made available to corporate customers. They can be rolled into many reporting levels (e.g., account, department, project, and region). **A minimum of three levels of reporting is required.** An Issuer may wish to differentiate itself by creating additional reports and/or reporting levels. The needs of the corporate customer will ultimately determine what combination of reports will be produced.

Because there are fuel companies not yet fully participating in the Mastercard Fleet card Program, processors may receive 1644 records with partial data. Processors should fully utilize the available information that is provided in these records when creating Fleet card reports. Mastercard recognizes that processors will not perform certain analyses (e.g., Cost per Mile or Miles per Gallon) for these individual transactions that do not supply Driver Numbers, Vehicle Numbers, ID Numbers, or Odometer Readings.

10.0 Mastercard's Smart Data Online (SDOL) Reporting System

Mastercard Smart Data Online™ is a global, web-based reporting application that helps Issuers and their customers seamlessly organize, consolidate, analyze, and manage financial data. Smart Data Online reporting is designed to meet a company's specific needs.

The fleet data includes:

- Motor fuel service type
- Motor fuel product code
- Motor fuel unit price
- Motor fuel unit of measure
- Motor fuel quantity

Smart Data Online provides a limited number of standard fleet transaction reports such as:

- Fleet Costs – Provides a summary of transactions that includes the Card Acceptor Business Code (MCC) related to Fleet fuel transactions
- Fuel Brand Summary – Supplies a transaction summary where data is sorted by fuel brand and then by fuel product, which is derived from information in the fleet addenda record
- Fuel Exception/Detail – Itemizes fuel products purchased during a specified reporting period

With a clear picture of spending patterns, volume, and frequency, companies have an essential tool for identifying cost-saving opportunities. A detailed picture on individual relationships (i.e., fuel merchants) will prove invaluable as Issuers negotiate with suppliers.

11.0 Certification

Mastercard will make every effort to ensure that Fleet Card Program participants are providing a high level of data integrity for Mastercard Fleet Card transactions. Mastercard strongly recommends that issuers test the fleet program before engaging in broad issuance. This best practice enables issuers to validate that their processing parameter settings for the fleet program meets their specific needs not only for fleet-specific requirements in prompting, card encoding and authorizations but also to follow an account from its inception to transacting to reporting to funds settlement.

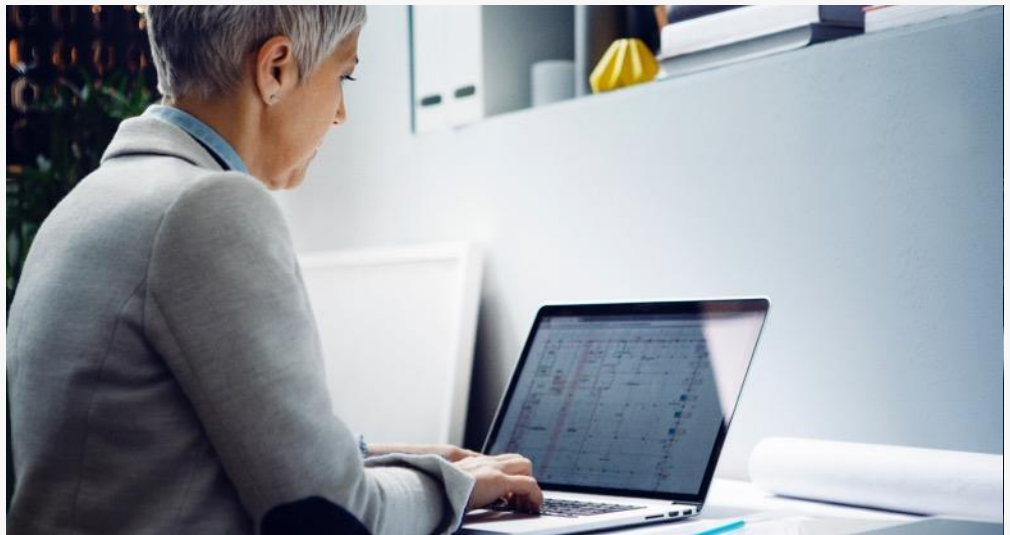
To support these requirements and considerations you need to make changes to your infrastructure. The introduction of chip technology adds a degree of complexity to the issuance of cards, as well as necessary upgrades to the authorization host system. Mastercard requires testing as key milestones are reached to ensure that the integrity and compliance of systems and infrastructure is maintained. The below areas require certification from Mastercard:

ISSUER	ACQUIRER
Chip Card Design Approval	
Card Personalization Validation (CPV)	Terminal Integration Process (TIP)
Network Interface Validation (NIV)	Network Interface Validation (NIV)
End-To-End Demonstration (ETED)	End-To-End Demonstration (ETED)

Mastercard Customer Delivery also assists issuers and acquirers in pilots and launch (card issuance and terminalization) as part of the implementation project.

A detailed description of the above certification processes can be found in:

- **Mastercard M-TIP Process Guide**
- **Mastercard Card Design Standards**
- **Mastercard Card Personalization Validation Manual**
- **Mastercard End-to-End Demonstration (ETED) Implementation Quick Reference Guide**



12.0 Data Capture: Financial Detail Addendum (Corporate Fleet Transaction Information)/1644

The Corporate Fleet Transaction Information addendum message is created by the Acquirer using data from the point of sale and static data appended by the Acquirer. The addendum message is sent to GCMS and then to the Issuer. The addendum message contains information that is vital to the Corporate Fleet card Program. The Corporate Fleet Transaction Information addendum message is only created for transactions that originate at petroleum locations (MCCs 4468, 5499, 5541, 5542, and 5983) when the transaction occurs on a card within the Fleet BIN range. Other industry-specific addendum messages will be created at defined industry locations. An Issuer/Processor uses the information from the addendum messages to build the management information reports that are the cornerstone of the Mastercard Fleet card Program. The Mastercard Corporate Fleet Transaction Information addendum contains general information about the Merchant, the transaction, and specific details about the fuel purchase (if fuel is purchased). The Mastercard Corporate Line Item Detail addendum contains information about any non-fuel purchase. *The Mastercard Corporate Fleet Transaction Information addendum should always be produced by Acquirers for transactions at petroleum locations (even if no fuel is purchased), as the Fleet addendum contains all basic Fleet transaction information (e.g., Oil Company Brand, Service Type, Unit Price, Unit Quantity, etc.). The Corporate Line Item Detail addendum will be created when non-fuel products are purchased at petroleum locations.*

The layout of the Financial Detail Addendum (Corporate Fleet Transaction Information)/1644 addendum message is available in the Mastercard IPM Clearing Formats Manual, Section 3. The fields of data provided are a factor in determining the interchange program for which the transaction is eligible. The current definitions of these programs are available in the interchange manuals published for each region.

Issuers should be aware that some Merchants will not prompt for any enhanced data at the point of sale, but will create and send an addendum message that includes the static data (Oil Company Brand, Service Type, etc.) and the information that they are able to capture at the point of sale (e.g., Product Type, Number of Gallons Purchased, Price per Gallon, etc.). This could affect the Issuer in that the Issuer may receive an addendum message that does not include a Driver Number, ID Number, Vehicle Number, or Odometer Reading because the cardholder was not prompted for enhanced data or it was not passed properly to the acquiring institution.

Appendix A

Product Code Conversion Table



Product Code Conversion Table

When a Financial Detail Addendum (Corporate Line Item Detail)/1644 is submitted in conjunction with non-fuel purchases conducted with a MasterCard Corporate Fleet card at a fuel location, a three-digit product code should be provided as a means to indicate what was purchased.

Mastercard Standard Product Code	Description
001	Unleaded Regular (85 to 87 octane)
002	Unleaded Mid Grade (88 or 89 octane)
003	Unleaded Premium (90 or 91 octane)
004	Unleaded Super (92 to 94 octane)
005	Methanol Unleaded Regular (86 or 87 octane)
006	Methanol Unleaded Mid Grade (88 or 89 octane)
007	Methanol Unleaded Premium (90 or 91 octane)
008	Methanol Unleaded Super (92 to 94 octane)
009	Methanol Regular Leaded
011	Regular Leaded Gasoline
012	Diesel
013	Diesel Premium
014	Kerosene
015	Liquid Propane Gas (LPG)
016	Compressed Natural Gas
017	M85 (Methanol 85%)
018	E85 (Ethanol 85%)
019	Ethanol Unleaded Regular (86 or 87 octane)
020	Ethanol Unleaded Mid Grade (88 or 89 octane)
021	Ethanol Unleaded Premium (90 or 91 octane)
022	Ethanol Unleaded Super (92 to 94 octane)
023	Ethanol Regular Leaded
024	Unleaded Reformulated (86 or 87 octane)
025	Unleaded Mid Grade Reformulated (88 or 89 octane)
026	Dyed Diesel
027	Gasohol
028	Biodiesel
029	Ultralow Sulfur Diesel (ULSD)
030	Motor Oil
031	Oil Change
032	Engine Service

Mastercard Standard Product Code	Description
033	Transmission Service
034	Brake Service
035	Solvent
036	Brake Fluid
037	Miscellaneous Parts
038	Miscellaneous Labor
039	Miscellaneous Repairs
040	TBA (tire, batteries, accessories)
041	Tires
042	Batteries
043	Automotive Accessories
044	Automotive Glass
045	Car Wash
046	Towing
047	Diesel Exhaust Fluid (DEF)
070	Cigarettes/Tobacco
078	Health/Beauty Aid
079	Miscellaneous Food/Grocery
080	Soda
081	Beer/Wine
082	Milk/Juice
083	Restaurant
089	Miscellaneous Beverage
099	Miscellaneous Other
100	Aviation 100 Octane
101	Jet Fuel
102	Aviation Fuel
150	Marine Fuel
200	Miscellaneous Fuel
201	Liquid Natural Gas

Mastercard Standard Product Code	Description
202	White Gas
203	Racing Fuel
300	Aviation Maintenance
301	De-icing
302	APU or Aircraft Jump Start
303	Aviation Catering
304	Tiedown or Hangar
305	Landing Fee
306	Ramp Fee
307	Call Out Fee
308	Plane Rental
309	Instruction Fee
310	Miscellaneous Aviation
311	Flight Planning/Weather Fees
312	Charter Fees
313	Ground Handling
314	Communications Fees
315	Aircraft Cleaning
316	Cargo Handling
317	Aviation Accessories
350	Boat Service

Appendix B

Oil Company Brand/Chain Name



Oil Company Brand/Chain Name

Acquirers are responsible for inserting the Mastercard-assigned oil company brand/chain identification code in the 1644 Corporate Fleet card Addendum Record, PDS 0620. This is a 4-character numeric value that identifies the brand or chain name, as opposed to the individual Merchant name.

Mastercard has assigned an identification code to the oil companies listed in the table below. Unbranded or unassigned retailers shall be assigned the value of "9999".

Oil Company Brand Name	Mastercard-Assigned Identification Code
U.S. Oil Companies	
Amerada Hess	0001
Amoco Petroleum Products	0002
Arco Products	0003
Ashland Oil	0004
BPOil	0005
Cenex	0006
Chevron USA	0007
Circle K Stores	0008
Citgo Petroleum	0009
Clark Brands	0010
Conoco Inc.	0012
Crown Central Petroleum	0013
Gulf	0014
Diamond Shamrock Inc.	0016
Exxon	0018
Fina Inc.	0020
Flying J Inc.	0021
Getty Petroleum	0022
Kwik Trip Inc.	0024
Mapco Express Inc.	0025
Marathon Oil	0026
ExxonMobil	0027
Murphy Oil USA Inc.	0028
Pennzoil Products Inc.	0030

Oil Company Brand Name	Mastercard-Assigned Identification Code
Phillips	0031
Quik Trip	0032
RaceTrac Petroleum Inc.	0033
Shell Oil	0034
Sinclair Oil	0035
Southland Oil	0036
Sun Company Inc.	0039
Texaco	0040
Tosco	0041
United Refining (Kwik Fill)	0044
Gas America	0051
Handy Way Food	0052
Holiday Stores	0053
Love's Country Stores	0055
Pure Oil	0057
Quaker State	0058
Thornton Oil	0062
United Dairy Farmer	0063
US Oil	0064
USA Petroleum	0065
Valvoline	0066
Western Energetix	0068
Casey's General Store	0069
Petro	0070
Pilot	0071
Sheetz	0072
Speedway	0073
Tesoro Alaska	0074
Travel Centers of America	0075
Union 76	0076
Warren Equities	0077
Wilco	0078
PDQ Store	0080
Wawa	0082

Oil Company Brand Name	Mastercard-Assigned Identification Code
FKG Oil	0083
GrowMark, Inc.	0085
AAFES	0086
Gate Petroleum	0088
MFA	0089
Nexcom	0090
The Pantry, Inc.	0091
Zions	0094
Nordstrom Oil	0095
Quarles Oil	0096
Krogers	0097
Erickson Oil	0098
Irving Oil	0101
Martin & Bailey Inc. (DBA Huck's)	0102
Lassus	0103
Family Express	0104
Home Depot	0105
Discount Tire	0106
Raceway Petroleum	0107
Meineke	0108
Giant Eagle	0109
Rudy	0110
Hyvee's	0111
7-Eleven	0112
Unbranded/Unassigned	9999
Canadian Oil Companies	
Amoco Canada	0500
Canadian Tire	0501
Canadian Turbo	0502
Chevron Canada	0503
Conoco Canada	0504
Domo Gas	0505
Fas Gas Oil	0506
Federated Co-op (Sonic)	0507

Oil Company Brand Name	Mastercard-Assigned Identification Code
Gulf Canada	0508
Husky	0509
Esso Canada	0510
Irving	0511
Mohawk	0512
Mr. Gas	0513
Murphy Oil Canada	0514
Olco	0515
PetroCanada	0516
Petro-T	0517
Pioneer	0518
Shell Canada	0519
Seven-Eleven	0520
Suncor (Sunoco Canada)	0521
Tempo	0522
Ultramar Canada	0523
Unbranded/Unassigned	9999
European Oil Companies	
Asda	0600
BFL	0601
BP/Mobil	0602
Burrnah/Major	0603
Butler/Arndale	0604
Elf	0605
Esso	0606
Fina	0607
Flare	0608
Gulf (Chevron)	0609
Heron	0610
J. Sainsbury	0611
Jet (Conoco)	0612
Kuwait	0613
Maxol	0614
Murco	0615

Oil Company Brand Name	Mastercard-Assigned Identification Code
Pioneer	0616
Repsol	0617
Safeway	0618
Shell	0619
SPAR	0620
Tesco	0621
Texaco	0622
Total	0623
UK	0624
VG	0625
W M Morrison	0626

Appendix C

Card Acceptor Business Codes



Card Acceptor Business Codes

The Mastercard Fleet Card can function as a fleet card only or a fleet plus Purchase and T&E card for those customers that require broad acceptance. At a minimum, all fleet cards must offer acceptance at the fuel MCCs 5541, 5542, and 5499. In addition, the maintenance MCCs (listed below) can be offered. However, if used as a fleet card only, the implication is that the fleet desires acceptance at traditional gasoline stations, convenience stores that sell motor fuel, and truck stops. In such cases, acceptance of the fleet card should include the **five** specific MCCs that Mastercard has designated as fleet/fuel MCCs:

Fleet/Fuel MCCs

4468	Marinas, Marine Service/Supplies
5499	Miscellaneous Food Stores - Convenience Stores, Markets, and Specialty Stores
5541	Service Stations (with or without Ancillary Services)
5542	Fuel Dispenser, Automated
5983	Fuel Dealers – Coal, Fuel Oil, Liquefied Petroleum, Wood

For “fleet only” use, all other MCCs should be blocked by the issuer. When this blocking is done, any transaction that occurs outside of these five MCCs will be rejected.

Maintenance

The Program Coordinator may also wish to allow transactions within the maintenance category. The maintenance MCCs listed below along with the fuel location MCCs listed above may all be available to the vehicle-assigned card. No other MCCs may be allowed for the vehicle-assigned card.

5013	Motor Vehicle Supplies and New Parts
5511	Automobile and Truck Dealers – Sales, Service, Repairs, Parts, & Leasing
5531	Auto Store, Home Supply Stores
5532	Automotive Tire Stores
5533	Automotive Parts, Accessories Stores
5599	Miscellaneous Automotive, Aircraft, and Farm Equipment Dealers – not elsewhere classified
7531	Automotive Body Repair Shops
7534	Tire Retreading and Repair Shops