DATA RULES & POLICIES

PRODUCT CLASSIFICATION DATABASE (PCDB)

VERSION: 1.0

REVISION 7 | REVISED 10/31/2024

Revision History

Each time this document is modified, increment the version number appropriately and add a new row to the table below. In the Comments column, make sure to document the changes that were made and any deficiencies or outstanding issue the document may still have.

Revision Number	Revision Date	Author	Notes
1			Initial draft
2	11/2012	S. Luckett	Added section on Multi-function parts
3	11/28/2012	PCdb Work Group	Revised examples and wording for Multi-function section
4	2/19/2013	T. Mitchell	Added rules for PartsToUse and Use to the Data Relationship Rules section. Added figures to explain Use and Multi-Purpose parts. Other general formatting and document clean-up.
5	1/6/2014	T.Mitchell	General document cleanup and example updates. Added definitions for new PCdb tables.
6	3/24/2022	T. Schiavo	Document structure changes. Clarified what the PCdb is and is not. Elaborated on the existing rules and definitions. Added rules and definitions that were never documented officially before. Updated and added more examples.
7	11/1/2024	T.Schiavo	Updated information under Section “Position”, specifically around the position “N/A”. Removed sections “Maintenance”, “Publication”, “Support”, and “How to Get Involved”

Table of Contents

Overview 5
What The PCdb Is 5
What The PCdb Is Not 5
Where The PCdb Is Used 6
- Aftermarket Catalog Exchange Standard (ACES®) 6
- Product Information Exchange Standard (PIES™) 6
- Internet Parts Ordering (IPO) 7

The Relationship Between the PCdb and PAdb 7
PCdb Tables: Entity Relationship (ER) Diagram 7
PCdb Tables: Field Definitions 8
- Structure 8
- Categories 8
- SubCategories 9
- Parts (Part Terminologies) 9
- PartsDescription 10
- Positions 11
- CodeMaster 14
- Use 15
- PartsToUse 18
- PartsRelationship 19
- Alias 21
- PartsToAlias 21

PartsSupersession 22
PIES™ Coded Values 23
ACES® Coded Values 26
Rules: Syntax 27
Categories 27
SubCategories 27
Parts (Part Terminologies) 27
Parts Descriptions 33
Positions 33
Use 33
Alias Names 33
Rules: Data Relationships 34

Notice

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Overview

This document outlines the data rules and policies for the Product Classification database (PCdb).

The PCdb is a **product classification hierarchy**, which standardizes product terminologies in a coded manner, to support the efficient exchange of product fitment and product information through the Aftermarket Catalog Exchange Standard (ACES®), Product Information Exchange Standard (PIES™), and Internet Parts Ordering (IPO) Data Standards.

The PCdb is a fully normalized, relational database, which standardizes the way products are classified and exchanged between trading partners through the Data Standards.

What The PCdb Is

The PCdb is:

- a **coded classification hierarchy** used specifically to communicate both vehicle specific and non-vehicle specific products between trading partners through the ACES®, PIES™, and IPO Data Standards.
- where ACES® and PIES™ coded values are located.

What The PCdb Is Not

The PCdb is not:

- a search taxonomy or hierarchy for catalog and web lookups/searches.
- a hierarchy of product marketing descriptions. This type of information should be communicated through the Description Segment of the PIES™ Data Standard.
- imposing limits on “presentation” of content – merely on the standardized classification of product terminology. There are no limitations on how trading partners present the data and provide searching capabilities in their own systems/interfACES®.

Where The PCdb Is Used

The PCdb is used in the following two Data Standards provided by the Auto Care Association.

Aftermarket Catalog Exchange Standard (ACES®)

There are multiple fields in the PCdb that are used in an ACES® xml file deliverable.

- **PartTerminologyID** is a required data field in every vehicle application record communicated through the ACES® format. This data element serves to classify and identify what product is the subject of the vehicle application record for a part number.
- **PositionID** is an optional data field for a vehicle application record communicated through the ACES® format. This data element serves to classify and identify what position/location is for the subject of the vehicle application record for a part number.
- **CodedValue** is a list of coded values for both required and optional fields communicated through the ACES® format. This is found the ***ACES®CodedValues*** table.

For specific examples, please refer to the ACES® Technical Documentation located here.

Product Information Exchange Standard (PIES™)

There are multiple fields in the PCdb that are used in a PIES™ XML file deliverable.

- **PartTerminologyID** is a required data field in every product information Item record communicated through the PIES™ format.
- **CodedValue** and **ExpiCode** are a list of coded values for both required and optional fields communicated through the PIES™ format. This is found in multiple relational tables listed below (See ER Diagram):

For specific examples, please refer to the PIES™ Technical Documentation located here.

Internet Parts Ordering (IPO)

There is one field in the PCdb that is used in the IPO Data Standard.

- **PartTerminologyID** can be included as part of the information sent through the IPO Data Standard.

For specific examples, please refer to the IPO Functional Implementation Guide located here.

The Relationship Between the PCdb and PAdb

The Product Classification database (PCdb) and the Product Attribute database (PAdb) are linked by the **PartTerminologyID**, which is found in the following tables:

Database	Table	Field
PCdb	Parts	PartTerminologyID
PAdb	PartAttributeAssignment	PartTerminologyID

PCdb Tables: Entity Relationship (ER) Diagram

Entity relationship (ER) diagrams are available for each Data Standard supporting database (VCdb, Qdb, PCdb and PAdb) on Auto Care Digital Hub.

PCdb Tables: Field Definitions

Structure

A PartTerminology is limited to two levels of classification, Category and SubCategory, and is grouped logically to help users search for the PartTerminology(s) they need in the PCdb to communicate their product(s) in the Data Standards.

Categories

(CategoryID and CategoryName) PCdb Categories are a logical collection of related vehicle components that perform together as a system or a top-level classification of similar non-application products. (For example - Accessories, Engine, Household, Shop and Office Products)

Table: **Categories**

Objective: This is the master table for categories in the PCdb

Fields:

Field Name	Format	Purpose
CategoryID	Integer	Primary key and identifier of each record
CategoryName	Text	Name/Label for the CategoryID

PURPOSE: **This is used as a master reference table for all Categories in the PCdb. This information is NOT communicated through an ACES® or PIES™ xml file.**

SubCategories

(SubCategoryID and SubCategoryName) PCdb Subcategories are vehicle assemblies or subsystems related to a high-level Category, and intermediate classification of related non-application products. This allows the user to filter across categories. (For example - Water Pump and Related Components, Cleaners and Removers, Appliances, etc…)

Table: **Subcategories**

Objective: This is the master table for subcategories in the PCdb

Fields:

Field Name	Format	Purpose
SubCategoryID	Integer	Primary key and identifier of each record
SubCategoryName	Text	Name/Label for the SubCategoryID

PURPOSE: **This is used as a master reference table for all Subcategories in the PCdb. This information is NOT communicated through an ACES® or PIES™ xml file.**

Parts (Part Terminologies)

(PartTerminologyID and PartTerminologyName) Part Terminology (formerly referred to as Part Type) defines the most granular product classification of vehicle parts and components as well as all other non-applications parts, supplies, accessories, components, and consumables traded in the aftermarket industry. (For example - Spark Plug, Engine Water Pump, T-Shirt, etc…)

Table: **Parts**

Objective: This is the master table for all part terminologies and their descriptions in the PCdb

Fields:

Field Name	Format	Purpose
PartTerminologyID	Integer	Primary key and identifier of each record
PartTerminologyName	Text	Name/Label for the PartTerminologyID
PartsDescriptionID	Integer	Identifier of a description used to describe the part terminology
RevDate	Date	The date in which the record was added or modified.

PURPOSE: **This is used as a master reference table for all part terminologies in the PCdb. Additionally, it keeps the part terminology to part description relationship. The PartTerminologyID is communicated through an ACES® or PIES™ xml file as well as the IPO Data Standard.**

PartsDescription

(PartsDescriptionID and PartsDescription) Part descriptions are descriptions assigned to a part terminology that describes what the part terminology is. All part terminologies must be assigned one and only one part description.

Table: **PartsDescription**

Objective: This is the master table of descriptions which are then assigned to part terminologies in the parts table of the PCdb.

Fields:

Field Name	Format	Purpose
PartsDescriptionID	Integer	Primary key and identifier of each record
PartsDescription	Text	Description/Label for the PartsDescriptionID

PURPOSE: **This is used as a master reference table for all part descriptions for part terminologies in the PCdb. This information is NOT communicated through an ACES® or PIES™ xml file.**

Positions

(PositionID and Position) PCdb Positions are only referenced in an ACES® Data Standard application record. A "position," also referred to as a "location", describes where a part is installed on the vehicle beyond what can be determined by the PartTerminologyName alone when there is more than one of the Part Terminology on the vehicle. (For example – Right, Left, Front, Rear, Dashboard, Headrest, etc…) The Positions table of the PCdb holds all unique positions that exist. Each part terminology is then assigned specific "valid" positions that can only be used for each part terminology. In ACES®, if the Position element is present in the file, it must use "valid" positions for the part terminology used.

Table: **Positions**

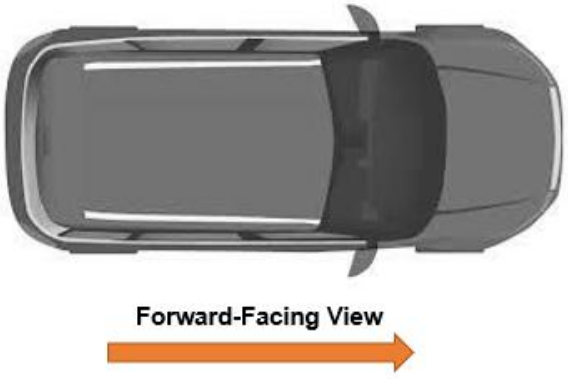
Objective: This is the master table for positions in the PCdb

Fields:

Field Name	Format	Purpose
PositionID	Integer	Primary key and identifier of each record
Position	Text	Name/Label for the PositionID

PURPOSE: **This is used as a master reference table for all positions in the PCdb. The PositionID is communicated through an ACES® File only.**

The position/location of a product is determined from a forward-facing view, relative to others of the same part terminology on a vehicle. The position field allows users to communicate additional distinction in an ACES® file for vehicle fitment.



Position Example:

Part Number A and B are both Disc Brake Calipers (Part Terminology) which fit the same vehicle. Part Number A fits the “Front Left” and “Rear Right” positions of the vehicle only, while Part Number B fits the “Front Right” and “Rear Left” positions of the same vehicle only. The position field allows users to communicate this distinction in an ACES® file.

Part Number	Part Terminology	Vehicle	QTY per car	Position
A	Disc Brake Caliper	2005 Ford F-150	1	Front Left
A	Disc Brake Caliper	2005 Ford F-150	1	Rear Right
B	Disc Brake Caliper	2005 Ford F-150	1	Front Right
B	Disc Brake Caliper	2005 Ford F-150	1	Rear Left

Location Example: Part Number A and B are both a Speaker (Part Terminology) which fit the same vehicle. Part Number A fits the “A-Pillar (Left)” location (aka position) of a vehicle only, while Part Number B fits the “A-Pillar (Right)” location of the same vehicle only. The position field allows users to communicate this distinction in an ACES® file.

Part Number	Part Terminology	Vehicle	QTY per car	Position
A	Speaker	2005 Ford F-150	1	A-Pillar (Left)
B	Speaker	2005 Ford F-150	1	A-Pillar (Right)

Position: N/A

By default, all part terminologies in the PCdb are assigned a Position of N/A (Position ID=1). The position N/A should never be delivered as a position on an ACES® application record. This default value is applied to all part terminologies in the PCdb because:

1. Not all part terminologies require ACES® applications to catalog.
    a. Example: Bubble Gum

2. The part terminology exists only once on a specific vehicle, and there is no need to differentiate using position.

Part Number	Part Terminology	Vehicle	QTY per car	Position	Explanation
13-5987	Engine Water Pump	2005 Dodge Ram 1500 – V8	1	**The Position Element in ACES® would not be used for the application record**	There is only ONE on the vehicle

3. The part number/part terminology exists multiple times on a specific vehicle, and there is no need to differentiate using position.

Part Number	Part Terminology	Vehicle	QTY per car	Position	Explanation
36-5648	Spark Plug	2005 Dodge Ram 1500 – V8	8	**The Position Element in ACES® would not be used for the application record**	The position of one spark plug to the next is irrelevant for a vehicle when they are all the same part.

If an application record in ACES® does not require a position to be communicated, leave the Position element off the application record. Leaving the Position element off the application record indicates that a Position does not apply. In any case, the Position of N/A should never be delivered as a position on an ACES® application record.

CodeMaster

Table: **CodeMaster**

Objective: This table keeps the many-to-many relationships between part terminologies, categories, subcategories and positions.

Fields:

Field Name	Format	Purpose
CodeMasterID	Integer	Primary key and identifier of each record
CategoryID	Integer	Identifier of the category assigned to the PartTerminologyID
SubcategoryID	Integer	Identifier of the Subcategory assigned to the PartTerminologyID
PartTerminologyID	Integer	Identifier of the PartTerminology
PositionID	Integer	Identifier of the position assigned to the PartTerminologyID
RevDate	Date	The date in which the record was added or modified.

PURPOSE: **This is used as a master reference table for all positions in the PCdb. The PositionID is communicated through an ACES® File only.**

Use

(UseID and UseDescription) Use indicates if a Part Terminology is valid for use in the ACES®, PIES™, or both Data Standards.

Table: **Use**

Objective: This is the master table for Use in the PCdb

Fields:

Field Name	Format	Purpose
UseID	Integer	Primary key and identifier of each record
UseDescription	Text	Name/Label for the UseID

PURPOSE: **This is used as a master reference table for all Uses in the PCdb. This information is NOT communicated through an ACES® or PIES™ xml file.**

All part terminologies in the PCdb must be assigned at least one Use. All Use assignments are held in the PartsToUse table of the PCdb. The following Uses are contained in the PCdb:

UseID	UseDescription	Note
1	ACES®	Indicates if a part terminology is valid to use in an ACES® xml file
2	PIES™	Indicates if a part terminology is valid to use in a PIES™ xml file

Non-Vehicle Specific and Multi-Purpose Part Terminologies:

There are part terminologies in the PCdb that are non-vehicle specific or multi-purpose which do not require vehicle fitment information in an ACES® xml file. These part terminologies are assigned a Use of (2) PIES™ only and are only allowed to be used in the PIES™ Data Standard.

Example:

PartTerminologyID	PartTerminology	UseID	UseDescription
14269	T-Shirt	2	PIES™
11718	Light Bulb	2	PIES™

When it comes to a vehicle, there can be many Light Bulbs located on it. As a result, (11718) Light Bulb cannot be used in an ACES® xml file. Instead, more granular part terminologies need to be used to describe what light bulb you are referring to in the fitment information provided in an ACES® file for a part number. An example of a granular "Light Bulb" part terminology is "Fog Light Bulb". These granular part terminologies are assigned an ACES® Use Only.

Vehicle Specific Part Terminologies:

There are part terminologies in the PCdb that are vehicle specific and are more granular to support the fitment information provided in an ACES® xml file. There are two scenarios that relate to these type of part terminologies:

Scenario 1:

A product that has only one function/use on a vehicle.

These part terminologies are assigned as Use of both (1) ACES® and (2) PIES™ to be used in both ACES® and PIES™ Data Standards. A disc brake caliper for example is always just a disc brake caliper on a vehicle used to slow down and stop a vehicle from moving.

Example

PartTerminologyID	PartTerminology	UseID	UseDescription
1080	Mud Flap	1 | 2	ACES® | PIES™
1704	Disc Brake Caliper	1 | 2	ACES® | PIES™

Scenario 2:

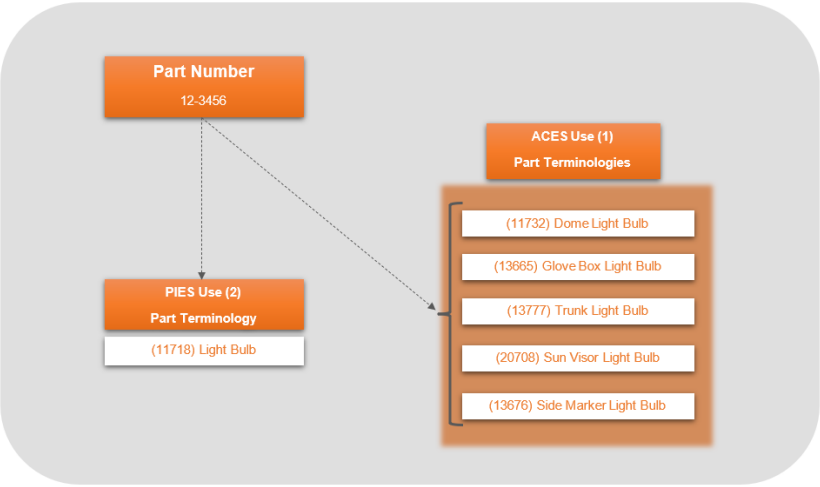
A product is multiple products based on its various uses/locations on a vehicle.

These part terminologies are assigned a Use of (1) ACES® only and are only allowed to be used in the ACES® Data Standard for a part number. These part terminologies are linked to a more general multi-purpose part terminology that is assigned a Use of (2) PIES™ only. These part terminologies are linked together through the PartsRelationship table in the PCdb, which further relates to how Part Attribute database (PAdb) attributes are assigned to a part terminology in the PAdb. *See the PAdb Data Rules & Policies documentation for more details.*

Example:

Part Number 12-3456 is a Light Bulb that is used for various purposes on a vehicle. As a result, there are more granular part terminologies in the PCdb to support fitment information in an ACES® file. In ACES®, you can assign multiple part terminologies to a part number due to the part terminology being tied to both the part number and vehicle application. However, in PIES™ you can only assign a single part terminology to a part number. Therefore, in PIES™, the part terminology communicated for part number 12-3456 would be (11718) Light Bulb, while in an ACES® file, one or multiple granular part terminologies (shown below) would be communicated for part number 12-3456.

Part Number	PartTerminologyID	PartTerminology	UseID	UseDescription
12-3456	11718	Light Bulb	2	PIES™
	11732	Dome Light	1	ACES®
	13665	Glove Box Light Bulb	1	ACES®
	13777	Trunk Light Bulb	1	ACES®
	20708	Sun Visor Light Bulb	1	ACES®
	13676	Side Marker Light Bulb	1	ACES®



PartsToUse

The PartToUse table indicates and stores the relationships between part terminologies and their assigned use(s) to be used in ACES®, PIES™, or both Data Standards. All part terminologies in the PCdb must be assigned at least one Use.

Table: **PartsToUse**

Objective: This table keeps the relationships between part terminologies and their assigned use(s)

Fields:

Field Name	Format	Purpose
PartTerminologyID	Integer	Identifier of a part terminology from the Parts Table.
UseID	Integer	Identifier of a Use from the Use table.

PURPOSE: **This table keeps all the part terminology to Use relationships to validate what Data Standard a part terminology can be used in. This information is NOT communicated through an ACES® or PIES™ xml file.**

PartsRelationship

The PartsRelationship table indicates and stores the relationships between part terminologies that are assigned a Use of (1) ACES® only and the part terminologies that are assigned a Use of (2) PIES™ only.

Table: **PartsRelationship**

Objective: This table keeps the one-to-many relationships between the part terminologies that are assigned a Use of (1) ACES® only and the part terminologies that are assigned a Use of (2) PIES™ only.

Fields:

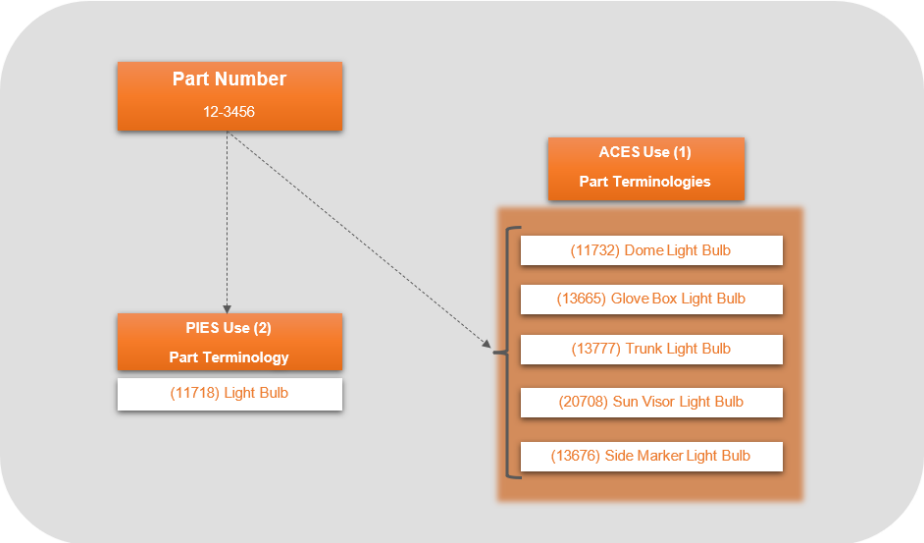
Field Name	Format	Purpose
PartTerminologyID	Integer	Primary key and identifier of each record. These are PartTerminologyID's found in the Parts table that are assigned a Use of (1) ACES® only.
RelatedPartTerminologyID	Integer	Identifier of the related part terminology. These are PartTerminologyID's found in the Parts table that are assigned a Use of (2) PIES™ only.

PURPOSE: **This table keeps all the part terminology to related part terminology relationships. This information is NOT communicated through an ACES® or PIES™ xml file.**

Example:

This example shows how one part number (12-3456) can be a vehicle specific product that has multiple uses on a vehicle. As a result, there are multiple granular vehicle specific part terminologies that are assigned a Use of (1) ACES® only. There is also a multi-purpose non-vehicle specific part terminology that is assigned a Use of (2) PIES™ only.

Part Number	PartTerminologyID	PartTerminology	UseID	UseDescription
12-3456	11718	Light Bulb	2	PIES™
	11732	Dome Light	1	ACES®
	13665	Glove Box Light Bulb	1	ACES®
	13777	Trunk Light Bulb	1	ACES®
	20708	Sun Visor Light Bulb	1	ACES®
	13676	Side Marker Light Bulb	1	ACES®



The PartsRelationship table creates and stores the connection between the (1) ACES® only Use part terminologies and their (2) PIES™ only Use part terminology.

PartTerminologyID	RelatedPartTerminologyID
11732	11718
13665	11718
13777	11718
20708	11718
13676	11718

Alias

(AliasID and AliasName) An Alias is an alternative name for a Part Terminology. A Part Terminology may have multiple names in the marketplace. In the PCdb, there can only be one part terminology for a product. The Alias table allows alternative names for part terminologies to be stored for reference use only.

Table: **Alias**

Objective: This is the master table for Alias in the PCdb

Fields:

Field Name	Format	Purpose
AliasID	Integer	Primary key and identifier of each record
AliasName	Text	Name/Label for the Alias ID

PURPOSE: **This is used as a master reference table for all Alias names in the PCdb. This information is NOT communicated through an ACES® or PIES™ xml file.**

PartsToAlias

The **PartsToAlias** table indicates and stores the relationships between part terminologies and their assigned alias(s). A single part terminology can have multiple alias names assigned to it. Also, a single alias name can get assigned to multiple part terminologies.

Table: **PartsToAlias**

Objective: This table keeps the relationships between part terminologies and their assigned alias(s)

Fields:

Field Name	Format	Purpose
PartTerminologyID	Integer	Identifier of a part terminology from the Parts Table.
AliasID	Integer	Identifier of a Use from the Use table.

PURPOSE: **This table keeps all the part terminology to alias relationships. This information is NOT communicated through an ACES® or PIES™ xml file.**

PartsSupersession

The **PartsSupersession** table stores the supersession/consolidation history information of a part terminology. A part terminology supersession/consolidation occurs when a part terminology is removed from the PCdb as a result of being a duplicate. The PCdb does not allow for duplicate part terminologies.

Table: **PartsSupersession**

Objective: This is the master table for part terminology supersessions/consolidations in the PCdb

Fields:

Field Name	Format	Purpose
OldPartTerminologyID	Integer	Identifier of a part terminology from the Parts Table that was superseded or consolidated.
OldPartTerminologyName	Text	Name/Label for the part terminology from the Parts Table that was superseded or consolidated.
NewPartTerminologyID	Integer	Identifier of a part terminology from the Parts Table that a part terminology was superseded or consolidated to.
NewPartTerminologyName	Text	Name/Label for the part terminology from the Parts Table that a part terminology was superseded or consolidated.
RevDate	Date	Date of when part terminology supersession/consolidation occurred

PURPOSE: **This is used as a master table for all part terminology supersessions/consolidations in the PCdb. This information is NOT communicated through an ACES® or PIES™ xml file.**

PIES™ Coded Values

PIES™ Coded Values are standardized, codified values that are for use in the PIES™ Data Standard only. In **PIES™ version 6.7 and previous** these values are stored in the PIES™ XSD. However, in **PIES™ version 7.0 and newer**, these values are stored in multiple relational PCdb tables listed below. These tables are supported by an ER Diagram located on Auto Care Digital Hub.

Table: **PIES™Code**

Objective: This is the master table for all PIES™ CodedValues.

Fields:

Field Name	Format	Purpose
CodeValueID	Integer	Primary Key and identifier of the CodeValue record.
CodedValue	Text	Identifier of the CodedValue for the record.
CodeDescription	Text	Name/Label for the CodedValue
CodeFormat	Text	Format of the CodedValue
Field Format	Text	Format of the Value supplied in PIES™ for the Coded Value record.
Source	Text	Source of the Coded Value

PURPOSE: **This is used as a master table for all PIES™ Coded Values for use in the PIES™ Data Standard (Versions 7.0 and newer).**

Table: **PIES™EXPICode**

Objective: This is the master table for all PIES™ EXPI Codes

Fields:

Field Name	Format	Purpose
EXPICodedID	Integer	Primary Key and identifier of the EXPICode record.
EXPICode	Text	Identifier of the EXPICode for the record.
EXPICodeDescription	Text	Name/Label for the EXPICode
EXPIGroupID	Text	Identifier of the EXPIGroup for the record.

PURPOSE: **This is used as a master table for all PIES™ EXPI Codes for use in the PIES™ Data Standard (Versions 7.0 and newer).**

Table: **PIES™EXPIGroup**

Objective: This is the master table for all PIES™ EXPI Code Groups

Fields:

Field Name	Format	Purpose
EXPIGroupID	Integer	Primary Key and identifier of the EXPIGroup record.
EXPIGroupCode	Text	Identifier of the EXPIGroup for the record.
EXPIGroupDescription	Text	Name/Label for the EXPIGroupCode

PURPOSE: **This is used as a master table for all PIES™ EXPI Group Codes.**

Table: **PIES™Field**

Objective: This is the master table for all PIES™ Field Names

Fields:

Field Name	Format	Purpose
FieldID	Integer	Primary Key and identifier of the PIES™ Field record.
SegmentID	Integer	Identifier of the Segment ID for the record.
ReferenceFieldNumber	Text	Identifier of the Reference Field Number for the record.
FieldName	Text	Name/Label for the Field Name

PURPOSE: **This is used as a master table for all PIES™ Field Names.**

Table: **PIES™ReferenceFieldCode**

Objective: This is the master table for all PIES™ Reference Field Codes.

Fields:

Field Name	Format	Purpose
ReferenceFieldCodeID	Integer	Primary Key and identifier of the PIES™ Reference Code Field record.
FieldID	Integer	Identifier of the PIES™ Field for the record.
CodedValueID	Integer	Identifier of the CodeValue for the record.
EXPICodeID	Integer	Identifier of the EXPICode for the record.
ReferenceNotes	Text	Name/Label for the Reference Note

PURPOSE: **This is used as a master table for all PIES™ Reference Field Codes.**

Table: **PIES™Segment**

Objective: This is the master table for all PIES™ Segments.

Fields:

Field Name	Format	Purpose
Segment ID	Integer	Primary Key and identifier of the PIES™ Segment record.
SegmentAbb	Text	Identifier of the Segment Abbreviation for the record.
SegmentName	Text	Identifier of the Segment Name for the record.
SegmentDescription	Text	Identifier of the Segment Description for the record.

PURPOSE: **This is used as a master table for all PIES™ Segments.**

ACES® Coded Values

(ACES® Version 4.2 and Newer)

ACES® Coded Values are standardized, codified values that are for use in the ACES® Data Standard only. In **ACES® version 4.1 and previous** these values are stored in the ACES® XSD. However, in **ACES® version 4.2 and newer**, these values are stored in a PCdb table listed below.

Table: **ACES®CodedValues**

Objective: This is the master table for part terminology supersessions/consolidations in the PCdb

Fields:

Field Name	Format	Purpose
Element	Text	Identifier of ACES® Element for the record.
Attribute	Text	Identifier of ACES® Attribute for the record.
CodedValue	Text	Identifier of the CodedValue for the record.
CodeDescription	Text	Name/Label for the CodedValue

PURPOSE: **This is used as a master table for all ACES® Coded Values for use in the ACES® Data Standard (Versions 4.2 and newer). Values in the CodedValue Field are communicated through an ACES® xml file.**

Rules: Syntax

Categories

1. **Case –** All Category entries are Title Case – with the first letter of each word capitalized. Exceptions to this are the words “and”, “to”, and “with”.

SubCategories

1. **Case -** All SubCategory entries are Title Case – with the first letter of each word capitalized. Exceptions to this are the words “and”, “to”, and “with”.

Parts (Part Terminologies)

1. **Case:** All Part Terminology entries are Title Case – with the first letter of each word capitalized. Exceptions to this are the words “and”, “to”, and “with”.
2. **Non-Brand Specific:** The PCdb does not include brand-specific or OE manufacturer references or jargon.
3. **Independent Terminology:** A Part Terminology record must be self-describing and not dependent on its relationship to a Category or Subcategory for context or uniqueness.
4. **Redundancy:** The PCdb contains one unique Part Terminology record for each for each product that exists. All other industry alternative terminologies for a product are added as Aliases to a Part Terminology in the PartsToAlias table in the PCdb.
5. **Consistency:** Related Part Terminologies of a Part Terminology should be classified consistently throughout the database. For example, all related Part Terminologies of the Part Terminology *Exhaust Gas Recirculation (EGR) Valve*, should be named consistently to align with *Exhaust Gas Recirculation (EGR) Valve*, such as *Exhaust Gas Recirculation (EGR) Valve Gasket, Exhaust Gas Recirculation (EGR) Valve Bolt, **etc**…*
6. **Abbreviations and Acronyms:** Commonly used abbreviations and acronyms are widely used in commerce and recognized in the automotive industry. Abbreviations and acronyms are acceptable for use in the PCdb when they are: a) widely used and recognized by most in industry b) refer to the generic (not brand-specific) part terminology and c) are used consistently throughout the PCdb for the same part type. For acronyms specifically, the full/extended name is used in the Part Terminology name followed by the acronym in parenthesis.

- **Example - Abbreviation:** The abbreviation “A/C” represents “Air Conditioner” or “Air Conditioning” in the industry. In the PCdb, it was determined that “A/C” would be used consistently for these Part Terminologies.
- **Example - Acronym:** The acronym “EGR” represents “Exhaust Gas Recirculation” in the industry. In the PCdb, Part Terminologies related to this are named consistently as “Exhaust Gas Recirculation (EGR)” followed by the extended detail of the product name, such as “Exhaust Gas Recirculation (EGR) Valve”.

7. **Multi-Purpose Part Terminologies:** A Multi-Purpose product is a single physical item that is used in more than one way on one or more vehicles.
    - One use of the PCdb is to classify products in an application catalog data file (ACES®). In this scenario, it is important to classify Multi-Purpose parts exactly as they are used on a vehicle. The use of the part on the vehicle is how the search will be done. Therefore, the PCdb must include all uses of a part in all vehicle applications through specific granular terminologies to describe what the product “does”.
        - **Example** - A specific electrical Relay is used in more than one way across multiple vehicle applications. A valid ACES® catalog record must refer to the Relay by the specific use of the product on the vehicle, i.e., Wiper Motor Relay, Horn Relay, Window Lift Relay.
    - The second use of the PCdb is also used to classify product information exchanged by way of the PIES™ data standard. In this scenario, it is appropriate to classify a more general term that describes what the product “is”, regardless of how it is used.
        - **Example** – In the example above the same Relay product is used in more than one way/location on a vehicle. The product attributes of the product do not change when it performs multiple functions. Therefore, the PCdb also includes a Multi-Purpose part terminology that describes what the product “is”, irrespective of what it “does”. In this example, the product is always a “Relay”. Therefore, a “Multi-Purpose Relay” exists as a PCdb part terminology.

- **Parts to Use Table:** Multi-Purpose Part Terminologies are assigned a "PIES™" Use only, while the more granular Part Terminologies are assigned an "ACES®" Use only in the PartsToUse table of the PCdb.

8. **Use of Position / Location:** Reference to a position should only be part of the Part Terminology name when it is an integral component of the name and helps define an item that is found in only one location in all vehicle applications.
    - **Example:** Interior Rear View Mirror
9. **Kits:** "Kits" are multiples of different products sold under one part number. These products are mainly non-assembled products. All the contents of a kit are not allowed to be listed out in the part terminology name. PIES™ KIT segment provides the ability to list out all the products that make up a part number for a part terminology.
    - **Example:** Part Number 12-3456 – Exhaust Muffler Kit
        - This part number contains a single exhaust muffler and any additional products for installation. If hardware, or other smaller parts are the only additional products in the box, then a "Kit" part terminology should not be used for the part number.
10. **Sets:** "Sets" are multiples the same product sold under one part number.
    - **Example:** Part Number 12-7891 – Exhaust Muffler Set
        - The part number contains two or more Exhaust Mufflers for a vehicle
11. **Assemblies:** An "Assembly" is a product that contains multiple products/components that are sold pre-assembled, as opposed to separately.
    - **Example:** Part Number 14-5698 – CV Axle Assembly
        - Potential individual components could include:
            a. CV Axle Shaft
            b. CV Joint
            c. CV Joint Boot
            d. Etc…

12. **Extended Information:** The Part Terminology name should not include extended information that is conveyed in other elements of either ACES®, PIES™, and/or their supporting databases. Some of this **prohibited content** includes:

    - **OE Manufacturer and Brand References**

Incorrect	Correct
GM Windshield Wiper Blade	Windshield Wiper Blade
Note	
OE manufacturer information is reserved for the PIES™ Data Standard. Specifically in the Extended Product and Description Segments.	

Incorrect	Correct
Shock Absorber - **Rancho**	Shock Absorber
Note	
Brand information is reserved for both the ACES® and PIES™ Data Standards. In ACES® it is communicated it at the header or application level for a part number. In PIES™ it is communicated in the ITEM Segment for a part number.	

- **Vehicle Fitment, Position and Vocation References**

Incorrect	Correct
2000-2005 Ford F-150 Headlight Set	Headlight Set
Shock Absorber – **Rear Right**	Shock Absorber
Note	
Vehicle fitment information, including positions, is reserved for the ACES® Data Standard. It can also be communicated in the Description Segment of PIES™.	

Incorrect	Correct
Engine Water Pump - Marine	Engine Water Pump
Note	
The use of vocation names is limited from being used in the part terminology name. The only exception to this is when a common product name is used for multiple different products that have different function/uses, have different product attributes/specifications, and cannot be differentiate in any other logical way. Also, if the product is unique to one vocation only. ***Example**: "Anchor"* *An "Anchor" in the marine industry is a product that anchors a boat in open water in place when to keep the boat from drifting.* *"Anchor" is also used in the home improvement industry. However, one use is to describe a product that creates an anchor on a wall to hang something, like a heavy picture frame.* *"Anchor" in this scenario is too generic by itself to describe these two different products. To create differentiation, two separate part terminologies were created, "Marine Anchor" and "Wall Anchor".*	

- **Trademark, Registered Trademark, and Copyright References**

Incorrect	Correct
Teflon™ Tape	Thread Sealant Tape
Note	
Trademark ™, Registered Trademark ®, and Copyright © information cannot be used as a part terminology name due to being protected.	

- **Product Attribute/Specification References**

Incorrect	Correct
Electric Fuel Pump **Mechanical** Fuel Pump	Fuel Pump
Disc Brake Pad Set - **Ceramic**	Disc Brake Pad Set
Disc Brake Caliper - **Red**	Disc Brake Caliper
5" Diameter Exhaust Pipe	Exhaust Pipe
Note	
Product attribute/specification information is reserved for the PIES™ Data Standard. Specifically, in the Attribute Segment, using PAdb attributes or user defined attributes. It can also be sent in ACES® as a Qdb Qualifier and/or fitment note, only if the information is required for differentiating multiple part numbers of the same product between multiple products for the same vehicle.	

- **No XML reserved characters**

Parts Descriptions

- **Case -** First letter of each sentence is capitalized.
- Each sentence ends with a period ".".

Positions

- **Case -** All Position entries are Title Case – with the first letter of each word capitalized. Exceptions to this are the words "and" and "to".
- **No XML reserved characters**.

Use

- **Case:** All Use entries contain uppercase letters only.

Alias Names

- **Case -** All Category entries are Title Case – with the first letter of each word capitalized. Exceptions to this are the words "and", "to" and "with".

Rules: Data Relationships

1. Every PartTerminology record is required to be associated with only one Subcategory which is in turn associated with only one Category.
2. No PartTerminology shall be orphaned or left without a Subcategory and Category relationship.
3. Every PartTerminology record is required to be associated with only one PartsDescription relationship.
4. Any PartTerminology may have one or more Positions associated with it, in addition to the 'N/A' Position. The position "N/A" is by default assigned to all Part Terminologies. Part Terminologies with a UseID of (2) PIES™ only can only be assigned the default position of 'N/A'.
5. A PartTerminology can carry a UseID of both (1) ACES® and (2) PIES™ in the PartsToUse table. These cases represent Part Terminologies that are suitable for both ACES® and PIES™ and therefore they will be allowed to carry both Positions and Product Attributes from the PAdb.
6. A PartTerminology can carry a UseID of only (1) ACES® in the PartsToUse table. These cases represent Part Terminologies that are suitable for ACES® only and therefore are allowed to carry positions. Product Attributes from the PAdb for these (1) ACES® only PartTerminologies are held on the Multi-Purpose (1) PIES™ only PartTerminology assigned to it in the PartsRelationship Table.
7. A PartTerminology can carry a UseID of only (2) PIES™ in the PartsToUse table. These cases represent Part Terminologies that are suitable PIES™ only and therefore are NOT allowed to carry positions. However, they are allowed to carry Product Attributes from the PAdb.
8. Only Positions associated to a PartTerminology can be used in an ACES® file for that PartTerminology.
9. No PartTerminology shall exist without a Use relationship.
10. PartTerminologies can be assigned multiple Alias relationships in the PartsToAlias table.
11. One AliasID can be assigned to multiple PartTerminologies in the PartsToAlias table.
12. A PartTerminology that has been deleted due to being a duplicate record of another existing PartTerminology are superseded/consolidated and recorded in the PartsSupersession table. A deleted Part Terminology may be superseded to one or many Part Terminologies. Also, multiple PartTerminologies may be superseded to one PartTerminology.

13. No duplicate records in any PCdb table.
14. No records in the PCdb that allow users of ACES® and PIES™ to communicate the same product in multiple different ways.