



Introduction



Jonathan Larsen

- 20+ years in the Industry
- o **Title:** Manager Data Quality Aka Cat Herder
- Background
 - Dana Clevite Engine Parts
 - MAHLE Aftermarket
 - Auto Care Association





Goal
right part
right place
right time



There is no them, it is us











Look to your left

Look to your right





eLearning Course for ACES & PIES



Total Purchases

313

Course Completes

116

Organizations

122







ACES COMPONENTS/ CONTENT OF AN APPLICATION

Vehicle Application

Part Number

Product Description

Quantity

Qualifier/Note







DATABASE QUALIFIER

Qdb

DATABASE
PRODUCT CLASSIFICATION

PCdb

DATABASE BRAND TABLE

Brand

DATABASE

PRODUCT ATTRIBUTES

PAdb

BEST PRACTICE

Best Practices



PIES COMPONENTS/ CONTENT OF A PRODUCT

Marketing

Description

Pricing

Packaging

Performance & Physical Attributes

Kit Content

Interchange

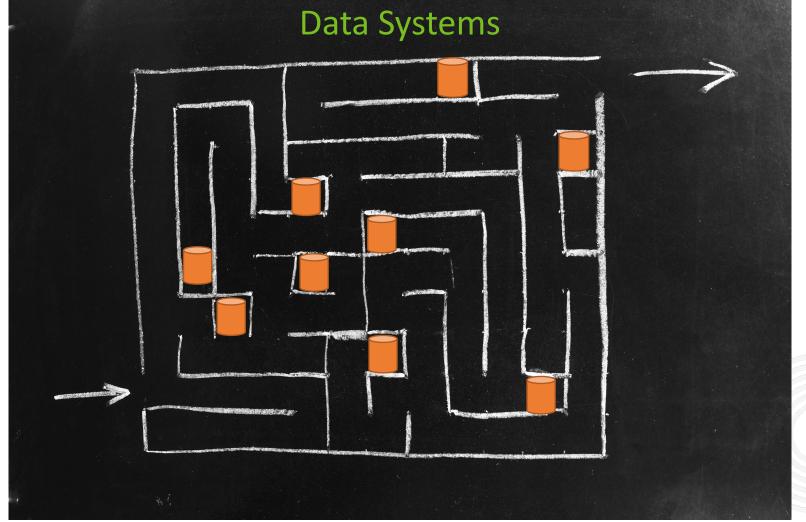
Digital Assets

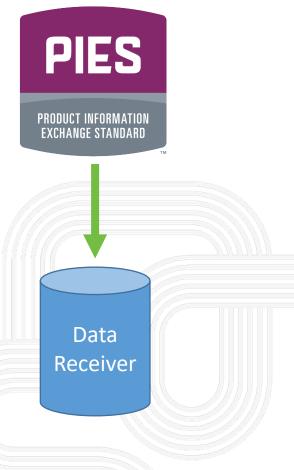
Hazmat



PIES







autocare*

connect

You are here

Data System





One Data Solution



Send out content to Data Receivers



What version of PIES are you using? (ACEN) Knowledgexchange







Question

What do you want to get out this next hour?



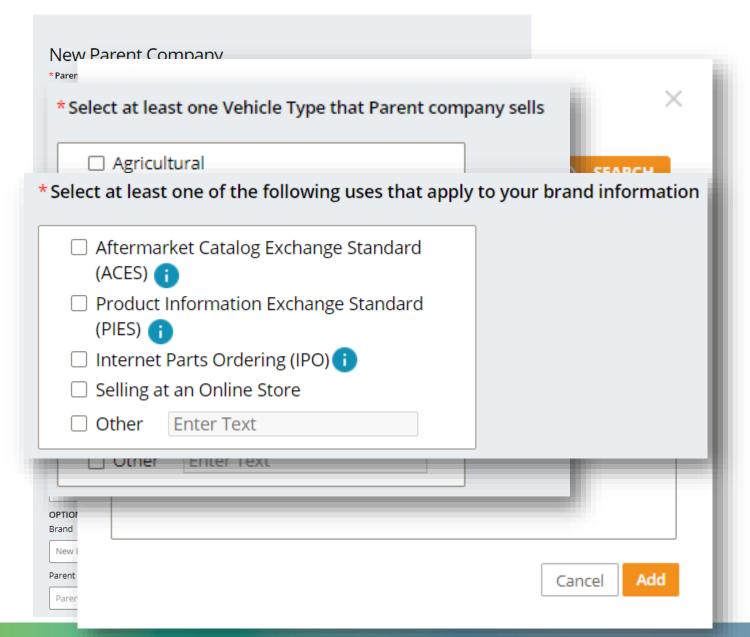
Subject Matter Experts (SME)







Brand





- This helps us!
- Add
 - Products
 - Vehicle types
 - Standards
 - o website



Marketing Copy





Features and Benefits



Descriptions





Multi-Purpose Products



The Light Bulb and Vacuum Cleaner

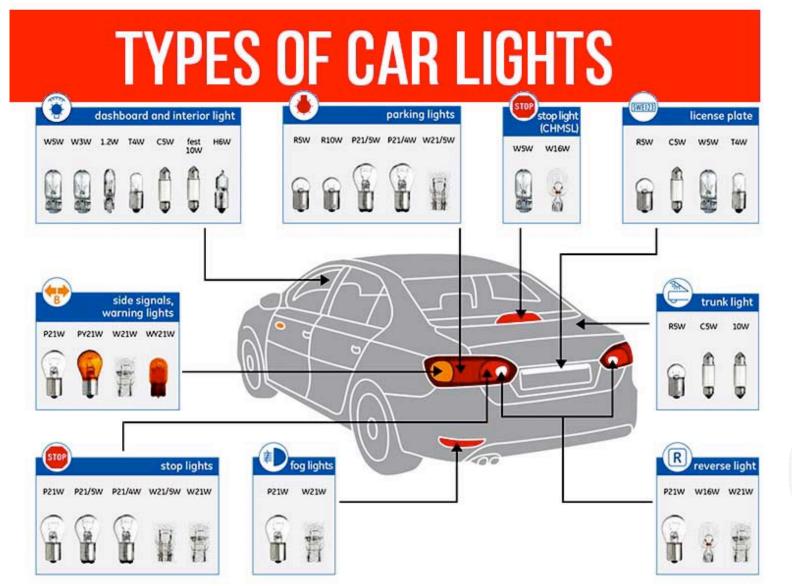




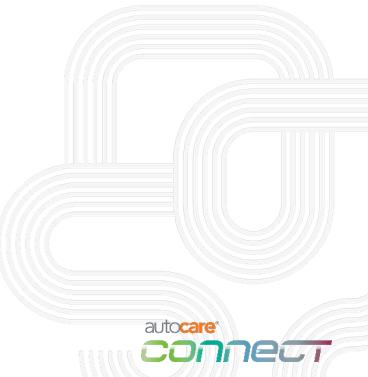




Location Descriptions







Multi-Purpose Products



Description

- o Nuts, bolts, bulbs, screws, washer and more.
- o PartsRelationship table was created to help provide a many-to-one relationship for part terminologies within a PIES file

Benefits

- Stopping the random selection of one Part Terminology
- Use attributes for only the PIES Usage Part Terminology



PCdb:Usage



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.



PCdb:PartsRelationship



Table: PartsRelationship

Objective: This table keeps the many-to-one 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.



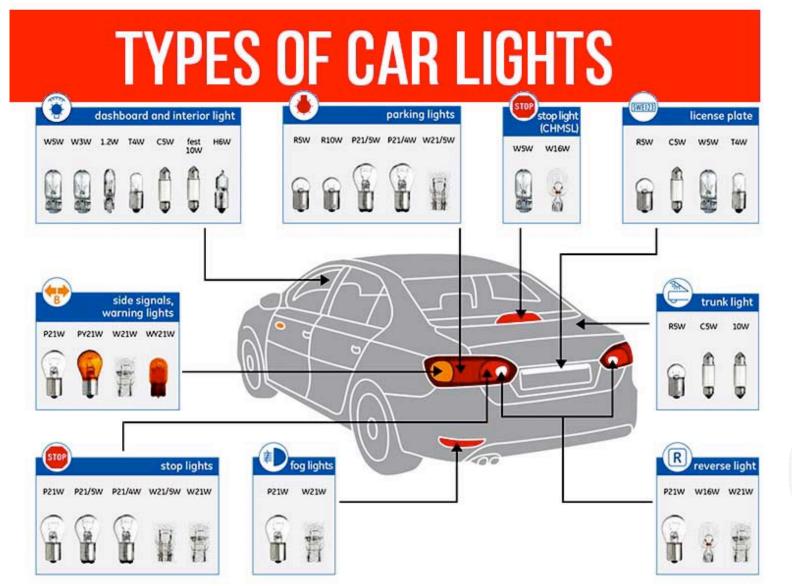
Example



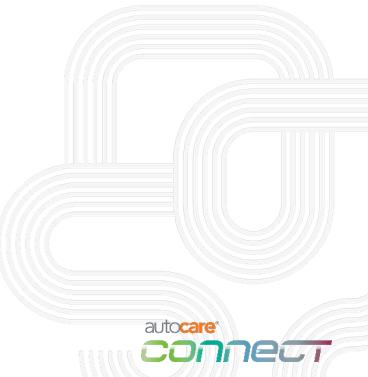
Part Number	PartTerminologyID	PartTerminology	UseID	UseDescription
	11718	Light Bulb	2	PIES
	11732	Dome Light	1	ACES
12-3456	13665	Glove Box Light Bulb	1	ACES
	13777	Trunk Light Bulb	1	ACES
	20708	Sun Visor Light Bulb	1	ACES
	13676	Side Marker Light Bulb	1	ACES



Location Descriptions

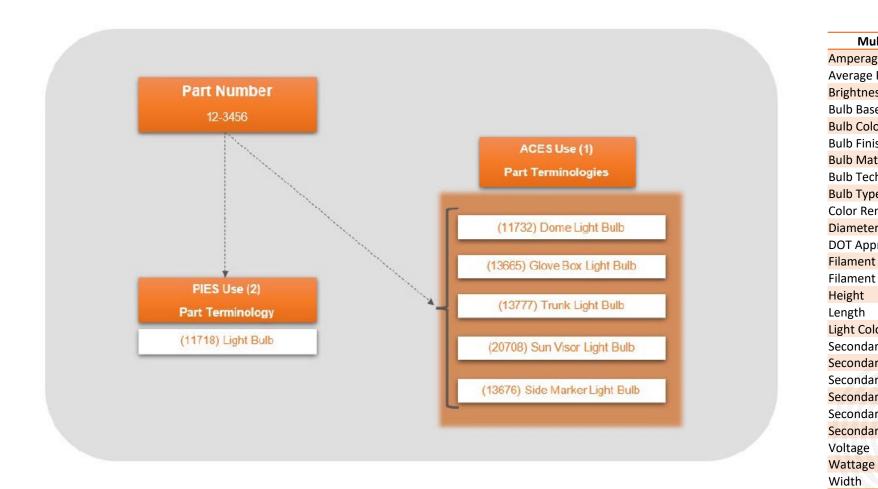






Example





Multi-Purpose Light Bulb Attributes Amperage Rating Average Rated Life Brightness **Bulb Base Type Bulb Color Bulb Finish Bulb Material Bulb Technology** Bulb Type Color Rendering Index (CRI) Diameter **DOT** Approved **Filament Quantity** Filament Type Height Length **Light Color Temperature** Secondary Amperage Rating Secondary Average Rated Life Secondary Brightness Secondary Filament Type Secondary Voltage Secondary Wattage





User Defined Attributes



User Defined Attributes





Package Contents (Kits)

Kit Contents
Contents



[Part Terminology] Part Number (Interchange)

OE interchanges



Description (Description)

Application Description



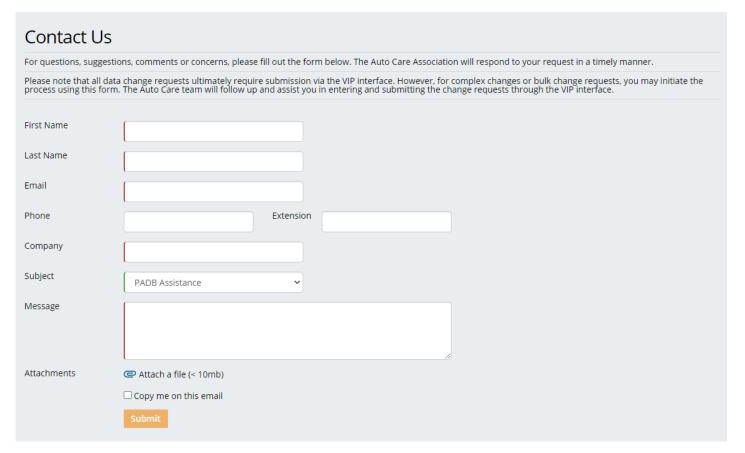
Prop 65 Warning (HAZMAT) – review best practice guide



User-Defined Attributes



- Email: <u>technology@autocare.org</u>
- Use the Contact Us within autocarevip.com







KITS



Kitting/Packaging



- Kit Segment of PIES
 - o Provides Standardization and Structure to Convey a "Bill of Material"
 - Clean Detailed Information
 - Speeds Up Processing Times
- Virtual Kits
 - Reduce inventory
- Validate Kit Content
- Data Governance



Kit Example

<Item MaintenanceType="A">

<Kit MaintenanceType="A">

<Kit MaintenanceType="A">

</Kit></Kits> ...

<ComponentBrand>BFJK</ComponentBrand>

<ComponentBrand>BFJK</ComponentBrand>

<SequenceCode>1</SequenceCode>

<SequenceCode>2</SequenceCode>

<Items>

<Kits>

</Kit>

</Item> </items>



Flex Engine Hose Kit

```
<ComponentPartNumber IDQualifier="VC">HOS001</ComponentPartNumber>
<Description DescriptionCode="DES" LanguageCode="EN">48 in Length .16 in Dia
<QuantityInKit UOM="EA">1</QuantityInKit>
<ComponentPartNumber IDQualifier="VC">HOS002</ComponentPartNumber>
<Description DescriptionCode="DES" LanguageCode="EN"> 24 in Length .375 in Diameter Radiator Hose </Description>
<QuantityInKit UOM="EA">1</QuantityInKit>
```

Hose / Line Inside Diameter: .16, .375, .625, .75, 1.5

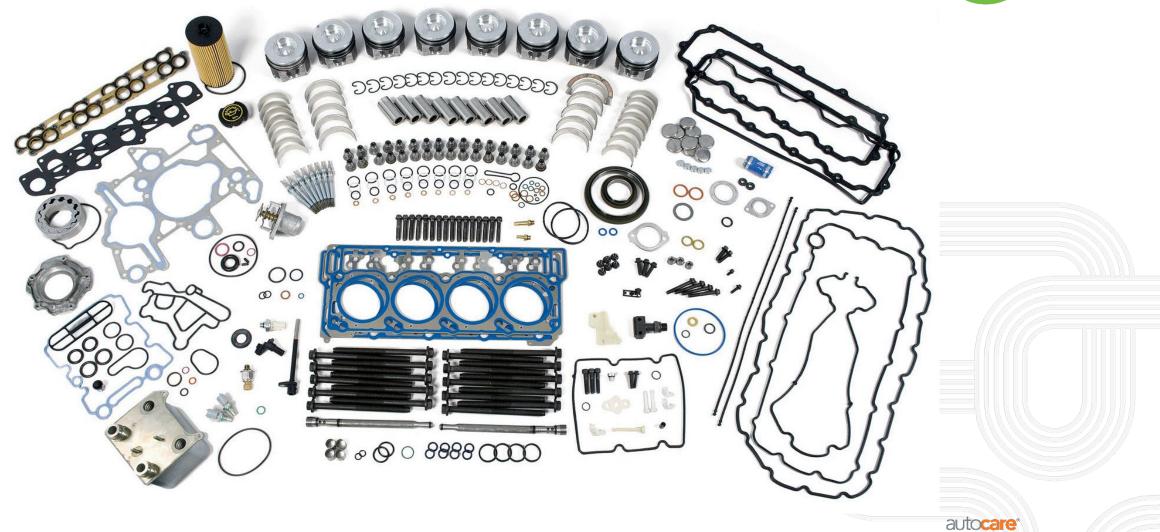
Hose / Line Lengths (in): 24, 48, 48, 48, 25

Hose / Line Quantity:



Kit Example





Package Contents







Final thoughts on Kits









Interchanges



Interchanges



One to One

One to Many

Many to Many

Partial

Packaging Differences



One Part to Many Part Interchanges





	Caterpillar OE	Clevite
Cylinder Sleeve Assembly	2506556	226-1967
Cylinder Sleeve	1105800	224-4493X
Piston	8N3182	224-3369X
Ring Set	9S3068	S40963
Piston Pin	7N9804	223-1829
Lock Ring	9H4015	223-5503
Sleeve O-Ring Kit	5P8768	223-7188

<PartInterchange MaintenanceType="A" LanguageCode="EN" TypeCode="A" BrandAAIAID="BVTL">

- <PartNumber InterchangeQuantity ="1" UOM="EA">1105800</PartNumber>
- <PartNumber InterchangeQuantity ="1" UOM="EA">8N3182</PartNumber>
- <PartNumber InterchangeQuantity ="1" UOM="EA">9S3068</PartNumber>
- <PartNumber InterchangeQuantity ="1" UOM="EA">7N9804</PartNumber>
- <PartNumber InterchangeQuantity ="1" UOM="EA">9H4015</PartNumber>
- <PartNumber InterchangeQuantity ="1" UOM="EA">9H4015</PartNumber>

</PartInterchange>



Partial Interchanges



Standard Interchange



Supplier Part Complete Assembly



Supplier Part Tensioner Pulley
SubAssembly



OE Part Complete Assembly



OE Part Complete Assembly



Packaging Differences Interchanges



Standard Interchange











My Challenges





Manufacturers

Talk with your Trading Partners



Trading partners (Sellers)

talk with your Manufactures



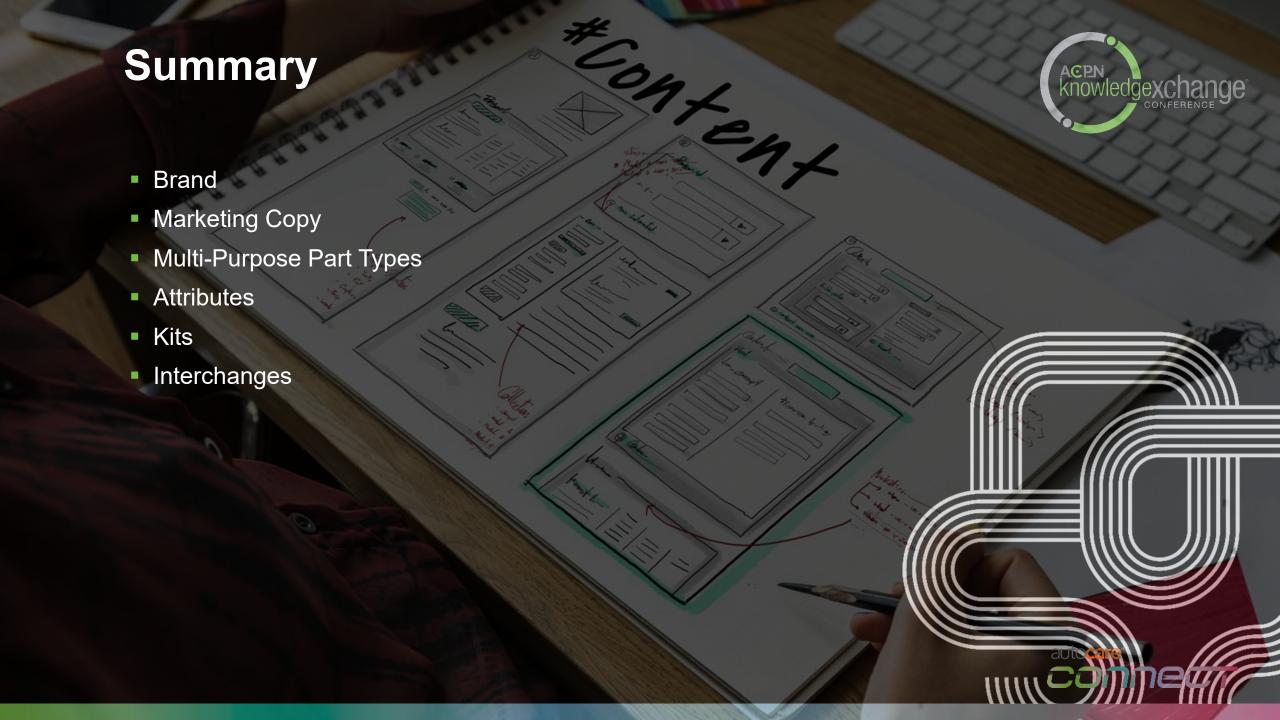
Talk with your solution providers



Review your content

Pick one thing that you would like to improve











Thank You!

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