DEMYSTIFYING THE PRODUCT INFORMATION EXCHANGE STANDARD

Volume 2: Using PIES for Product Attributes

FOREWORD

Demystifying the Product Information Exchange Standard (PIES)

The Auto Care Association Product Information Exchange Standard (PIES) is a robust and thorough standard for the exchange of a broad range of Product Information pertaining to the Automotive Aftermarket industry.

The Standard was adopted in its first form in 2004, and several enhancements and additions to the standard have been adopted in the intervening years.

The PIES Standard is a very powerful standard, covering over 180 different data elements that can be transmitted. However, it has never been necessary to use PIES to convey a complete set of data as per the standard. The PIES Standard can be used to convey a number of different types of information, either in a complete file format, or in 'segments', depending upon capabilities of the manufacturer, and the needs of the recipient. In simple terms, PIES can be sent in small 'bites', depending on the needs of the recipient.

While it is a best practice within a manufacturing environment to consolidate source data in a Master Data Management strategy, it is not uncommon for different departments within a data recipient's organization to require its own specialized data, and not a complete Master Datafile. There has been strong adoption within the recipient community to adopt the PIES standard and maintain synchronized data between logistics systems, there are a number of unique 'data recipient points' which all require product information.

For example, the Buyer's department may need a Price File, or an Item Setup File. The Marketing Department may need special market copy, promotional pricing, and additional images or brand logos to set up promotions publishing, and so on. Typically, all these departments require their own distinct data sets. Why not use PIES to send it to them?

The purpose of this series of Whitepapers is to help develop a common understanding that the PIES Standard can be used for special single purpose uses, as opposed to a Master Data File, thus accommodating the needs of the various recipient's constituents.

In this way, companies can use the PIES standard for much smaller-scale initiatives, without heading down the path of a major, Master Data Management initiative.

The following describes, in non-technical jargon, just how the PIES Standard can be used, what information it can carry, as well as providing some examples of how to use parts of the PIES Standard as 'single purpose' files, meeting the needs of different users.

This is the first in a series of Whitepapers which will provide practical examples of how to use parts of the PIES standard.

Volume 1: Using PIES for Pricing

Volume 2: Using PIES for Product Attributes

Volume 3: Using PIES for Rich Content, and other Market Copy

Volume 4: Using PIES for Images and Digital Content

Volume 5: Using PIES for Kit and Set information

Volume 6: The Description Segment – Definitions and Uses of the Description Codes

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Introduction

The Segments of PIES and What They Are Used for

Price Sheet Segment

The Price Sheet Segment is used only when Prices are being sent to a recipient.

The Price Sheet Segment identifies, for the recipient, the Price Sheet Name and Number, its Effective and Expiry Date, the Currency in which Pricing is being sent, and to what Zone or Region the Price Sheet applies. If you are sending multiple price sheets for different regions or zones, then you simply create a PIES Price File for each region or Zone. See the section entitled, PIES for Pricing, later in this document.

Market Copy Segment

The Market Copy Segment is a new segment of the PIES Standard, and is used to send rich, descriptive content, images, and other digital assets, which relate to the sending Company, its Brand, or a Sub-Brand or Product Category.

The Market Copy Segment is a companion to a PIES File, and its content is generally used by Recipient's Marketing Departments or Webmasters, to gather publishable descriptive copy and images or other digital media, for general contents for websites and other marketing and advertising needs. Company Logos, Warranty Information, Brand Features and Benefits, Instructional Videos, and other such information are typically conveyed in the Market Copy Segment.

Item Segment

The Item Segment is the 'meat' of a PIES file, and covers many different areas of part information which are crucial to various parts of the recipient's business. The Item Segment contains a number of sub-segments, each able to provide specific additional information about a part. They include:

Description Sub-Segment

The Description Segment contains 15 different ways to describe a part. These descriptions are used in many different ways by recipients.

Pricing Sub-Segment

The Pricing Segment is used specifically to send specific pricing information about the product. The difference between the Pricing Segment and the Price Sheet Segment is that the Pricing Segment is intended to send information specific to the part number, as opposed to more 'global'

information, thus giving it flexibility on a part by part basis. Things such as Price Levels, Price Break Quantities, specific effective and expiration dates, publishable and net pricing can be conveyed in the Pricing Segment. See the section entitled, PIES for Pricing, later in this document.

Extended Product Information (EXPI) Sub-Segment

The Extended Product Information Segment, or EXPI Segment, has become an increasingly important and versatile segment of the PIES Standard, handling 7 different extended areas of information requirements for a business.

Package Segment – a means to convey packaging dimensions and information at all package levels, from unit package, through cases and pallets, to containers.

Hazardous Material Sub-Segment – a means to build and convey an electronic HAZMAT manifest for the product, including all regulatory codes required to ship hazardous material.

Kit Sub-Segment – the means by which to send a list of materials contained in a product that is a Kit.

Part Interchange Sub-Segment – the means by which to send interchange information specific to a product, including comparative grade levels and comments referable to an interchanged part.

Digital Assets Sub-Segment – the means by which to send a wide variety of different types of electronic media, from images to technical drawings, installation instructions, planogram information, or even line art for a product. The technical information that accompanies a 'digital asset' would be used to confirm quality and consistency by the recipient, according to industry best practices, and would be used extensively by a recipient's Webmaster, or Publishing department. The Auto Care Association's Technology Solutions Committee has published a comprehensive document outlining best practices in the conveyance of electronic media, entitled "*Automotive Aftermarket Imaging Best Practices Guideline*".

The 3 Things Every PIES File Must Have

When creating a PIES File, there are three key elements any type of file must have:

1. **Header Segment** – this Segment identifies, at a minimum, what Version of PIES file is being sent.

2. **Item Segment** – this Segment identifies, at a minimum, a Part Number and its Brand, and what the recipient is to do with this information (i.e. Are you sending a record that is being Added, a

record that should be Changed, a record that should be Deleted, or whether this is just a confirmation file and No Change is required.

3. **Trailer Segment** – this Segment identifies how many Part Numbers are being sent in the file, and the date the file was generated.

Every other Segment of a PIES File is optional, depending upon the material you are sending to accompany the Part Record.

Overview of Attribute and Uses

Product attributes are distinct characteristics of a finished product that can help to differentiate it from others, as well as to group/sort similar products. These attributes may be used to detail common product characteristics like color, as well as ones that are unique to select part types such as "tread depth". Product attributes can be leveraged through all sales channels; however, the true value is exposed in its application within the retail and consumer environment.

Retailers as well as consumers may be faced with searching and reviewing huge product selections both on-line and offline to determine the products that may fit their needs. This data can be leveraged to assist with product confirmation by reviewing the attributes that have been assigned. However, by far the strongest benefits for retailer and consumers can be achieved by incorporating an attribute filtering system.

In some scenarios where a very large product selection exists within a part type, product attributes can be utilized to assist in filtering the selection, reducing the time spent in research and allowing the retailer/consumer to concentrate on products that fit their requirements.

Example - Common Attribute Selection

A customer is looking to update their interior with a new color scheme, and is shopping for replacement products that are red in color. When requesting to view only products that have a color attribute of "Red", product selection can be quickly reduced by removing the undesired colors. What the customer would now view is a filtered list of products of steering wheels, shift knobs, seat covers, etc., that meet the customer's needs.

Example - Targeted Attribute Selection

A retailer is working to create a custom exhaust system; with the specific request the exhaust system maintains a "3 inch" diameter throughout the system. Offering the ability to filter the available products

based on inlet and outlet diameter sizes of "3 Inch" eliminates the long process of manually researching available digital and printed information to identify the exhaust parts that meet the customer's request.

 Example - Component Inclusion

In some cases, product attributes are utilized to convey if the product includes additional common installation accessories such as gaskets. In a search for replacement water outlet housing - product attributes can quickly help determine if a gasket would be included without having the retailer needing to hysically inspect the box and packaging. Component inclusion can simply be answered with a Yes or No.

Pies Attribute Delivery Methods

There are two means of delivering product attributes within the Attribute Segment delivery. The first method is to utilize the pre-established attributes from the PAdb database, and the second is to create custom product attributes for your delivery. As of current both practices are acceptable, and can even be "combined" together if need be, sending both pre-established and custom attributes.

Product Attribute Data Base (PAdb)

Product Attribute Segment delivery starts with the decision of researching and collecting the product-specific physical and performance attributes that will provide the best value to the user. For some part types the selection may be quite simple while others may have many potential attributes, this poses the challenge of selecting which attributes hold the highest value to the user.

The PAdb is an integral part of the Auto Care Association Standards Library, and was created to provide a standard, common attribute naming convention, attribute definition, standard measurement units, and, where applicable, standard lists of values for certain attributes.

These attributes have been reviewed by an industry expert council of manufacturers, distributors and retailers, spending many hours analyzing and determining the most valuable attributes for a given part type.

The PAdb represents over 25% of the most popular part terminologies sold today, and is growing at a rapid rate. Over 25,000 attributes have been compiled, representing almost 4000 Part Terminologies (as at Sept. 2013).

There are quite a few benefits in utilizing these pre-established attributes in your PIES delivery. Having a standard set of coded attributes, used commonly across the industry, frees up resources committed to part type research, and, more importantly, resources used to manage the mapping of different data for different trading partners. The delivery of uniform data across the supply and sell chains also reduces

costly errors, reduces time to deliver product information, reduces product confusion, and sells more parts for everyone.

Custom Product Attributes

For situations when a desired attribute is not part of the established PAdb, the creation of a custom product attribute can be utilized to fill the need in your PIES delivery.

For example, a retailer may have a need for a unique attribute, and specifically requests the inclusion of this attribute included with the "standard" attributes provided in their delivery. The custom attribute can be created and easily added to the delivery for the retailers use.

Best Practice - While custom attributes are a useful tool in your PIES delivery, they create a concern among retailers due to irregular unstandardized attribute naming and values making grouping and organizing data effectively quite difficult. Custom attributes should be reserved for scenarios where an attribute is not available within the PAdb. It is recommended that you thoroughly review the available attributes in the PAdb library before creating a custom attribute; and, if it does not exist within the library, petition for its inclusion, or determine whether another attribute already cataloged in the library may be better suited over a custom creation.

Using PIES to Send Product Attributes

The PIES Standard can be used in its entirety, or in parts, to convey critical information to trading Partners. One of the most useful pieces of information is the Attribute Segment. The PIES standard can be used as a standalone tool to convey product attributes describing important elements such as Form, Fit, Function and Performance characteristics related to a product. The PIES Standard now has a valuable library of attribute definitions, called the Product Attribute Database (PAdb), which provides consistent, clear attribute labels, lengths, and data types (along with other reference data) enabling everyone in the automotive aftermarket industry to describe their products in a common manner.

There are only a few fields (19), or elements, required from the PIES standard to actually send Product Attributes. They are drawn from the following Segments:

Header Segment

Item Segment

Attribute Segment

Trailer Segment

The following pages will show you how to quickly put together a PIES file for sending product attributes.

PIES HEADER Segment

A01	Header Segment	KM		<Header>	Example
A02	PIES Version Number	M	ID3/5	<PIESVersion>	6.5
A03	Submission Type	M	ID4/6	<SubmissionType>	FULL
A05	Blanket Effective Date	O	D	<BlanketEffectiveDate>	2009-01-03
A06	Changes Since Date	C	D	<ChangesSinceDate>	2008-12-01
A10	Parent DUNS or DUNS+4	O	ID9/13	<ParentDUNSNumber>	8888888844441
A11	Parent GLN	O	ID13	<ParentGLN>	7777777555551
A12	Parent VMRS ID	O	ID5	<ParentVMRSID>	GIANT
A13	Parent AAIAID	O	ID4	<ParentAAIAID>	BBCD
A20	BrandOwner DUNS or DUNS+4	E	ID9/13	<BrandOwnerDUNS>	88888888844441
A21	BrandOwner GLN	E	ID13	<BrandOwnerGLN>	7777777771234
A22	BrandOwner VMRS ID	O	ID5	<BrandOwnerVMRSID>	WONDR
A23	BrandOwner AAIAID	O	ID4	<BrandOwnerAAIAID>	BRST
A30	Buyer DUNS or DUNS+4	O	ID9/13	<BuyerDuns>	88888888844441
A35	Currency Code	O	ID3	<CurrencyCode>	USD
A37	Language Code	O	ID2	<LanguageCode>	EN
A40	Technical Contact Name	O	AN1/60	<TechnicalContact>	John Smith
A41	Contact Email	O	AN1/254	<ContactEmail>	john@smith.com

A01 – **Header Segment**, as previously mentioned, is a Mandatory Segment of any PIES file. The only mandatory items in the Header Segment are the PIES Version Number, and the Submission Type, but there are other important pieces of information which are either conditional, or provide information about the Sender of the file, which should be considered in practice. Use the following basic fields:

- A02 – PIES Version Number

- A03- Submission Type

- A05 – Blanket Effective Date OR A06 – Changes Since Date

- A13 – Parent AAIAID

- A20 OR A21 – BrandOwner DUNS or Brandowner GLN

- A23 – BrandOwner AAIAID

- A40 – Technical Contact Name

- A41 –Contact Email

PIES ITEM SEGMENT

B01	Item Segment	KM		<Items>	Example
B02	Maintenance Type	M	ID1	*MaintenanceType*	A
B03	Hazardous Material Code (Y/N)	R	ID1	<HazardousMaterialCode>	Y
B05	Base Item Number	O	AN1/48	<BaseItemID>	HOS100
B10	Item-Level GTIN	O	N12/13	<ItemLevelGTIN>	123456789012
B11	Item-Level GTIN Qualifier	C	ID2	*GTINQualifier*	UP
B15	Part Number	KM	AN1/48	<PartNumber>	HOS101
B20	Brand AAIAID	M	ID4	<BrandAAIAID>	BBBB
B25	Brand Label	O	AN1/60	<BrandLabel>	Wonderhose
B27	SubBrand AAIAID	O	ID4	<SubBrandAAIAID>	DCBA
B28	SubBrand Label	O	AN1/60	<SubBrandLabel>	
B30	ACES Applications	O	ID1	<ACESApplications>	Y
B32	Item Quantity Size	O	R1/8	<ItemQuantitySize>	16.0
B33	Item Quantity Size UOM	O	ID2	*UOM*	OZ
B34	Container Type	O	ID2	<ContainerType>	BO (Bottle)
B35	Quantity per Application Qualifier	O	ID3	*Qualifier*	NOR
B40	Quantity per Application	O	N1/8	<QuantityPerApplication>	12
B41	Quantity per Application UOM	C	ID2	*UOM*	EA
B45	Item-Level Effective Date	O	D	<ItemEffectiveDate>	2009-01-03
B50	Available Date	O	D	<AvailableDate>	2009-01-03
B55	Minimum Order Quantity	O	N1/8	<MinimumOrderQuantity>	10

B56	Minimum Order Quantity UOM	C	ID2	*UOM*	EA
B60	Product Group Code	O	AN1/10	<Group>	W12
B61	Product Sub-Group Code	O	AN1/10	<SubGroup>	W123
B62	Product Category Code	O	ID6	<AAIAProductCategoryCode>	330102
B63	UNSPSC Code	O	ID8/10	<UNSPSC>	11223344
B64	Part Terminology ID	O	ID4/5	<PartTerminologyID>	55555
B65	VMRS Code (Heavy Duty)	O	ID9	<VMRSCode>	010456789

B01- The **PIES ITEM Segment** gives you the means to identify the Part Number for which you are conveying the Price, along with other additional information that may be pertinent for your trading partner to actually use your PIES file. There are three Mandatory elements:

- B02 - Maintenance Type, indicates whether it is an 'Add, or Delete, or a Change to the item itself.

- B15 – Part Number, is the Primary Key for this segment, and must be included.

- B20 – Brand AAIAID, indicates the AAIA Brand.

- B64 – Part Terminology ID, indicates the Auto Care Association Product Classification Data Base (PCdb) Classification Code to which the product belongs.

PIES ATTRIBUTE Segment

F01	Product Attributes Segment	O		<ProductAttributes>	Example
F02	Maintenance Type	M	ID1	MaintenanceType	A
F05	Attribute ID (Type)	KM	AN1/80	AttributeID	1141, when F07=Y; Friction Material Thickness, Inner Pad, when F07=N
F07	PADB Attribute	M	ID1	PADBAttribute	Y
F08	Attribute UOM	O	AN1/20	AttributeUOM	mm (UOM Code, NOT UOM LABEL)
F10	Attribute Data	M	AN1/2000	<ProductAttribute>	7
F11	PADB StyleID	O	N1/5	StyleID	1
F15	Record Sequence	O	N1/3	RecordNumber	1
F17	Multi Value Quantity	O	N1/3	MultiValueQuantity	4
F18	Multi Value Sequence	KO	N1/3	MultiValueSequence	1
F20	Language Code	KO	ID2	LanguageCode	EN

F01- The **PIES Attribute Segment** gives you the means to send specific information pertaining to the form, fit, function, performance, and other physical characteristics of a product.

There are two ways to send product attributes – the first is using the Auto Care Association's Product Attribute Database (PADB), a library of standardized attributes for use by the automotive aftermarket. The other is to send 'custom' attributes; that is, attributes which are not contained in the PADB. There are subtle nuances in the use of the recommended PIES fields for each type of attribute. For example, when sending a PADB attribute, you send a series of CODES from the library which identifies the attribute to the recipient. When sending Custom Attributes, you send attribute LABELS for the Attribute Name and the Attribute's Unit of Measure, if applicable.

In all cases, the following PIES fields are the minimum required to send:

* F02 - Maintenance Type, indicates whether it is an 'Add, or Delete, or a Change to the item itself.

* F05 – Attribute ID, is the label for a Custom Attribute, or the PAID (Product Attribute ID Code) from the PADB Library.

* F07 – PADB Attribute, indicates, using a 'Y' or an 'N', whether the content is from the PADB library or whether the attribute being sent is a Custom Attribute.

* F08- Attribute UOM, indicates the Unit of Measure (if applicable) that describes the attribute's value. If a PADB attribute is being sent, it is the Unit of Measure CODE which is sent in lieu.

* F10 – Attribute Data, is the actual content – whether a measurement, a description, a value, or a 'Y' or 'N' indicator.

NOTE: There are provisions within this segment for advanced functions such as sending multiple-value attributes, and variations of attributes which are indicative of a particular 'style' of product. There is further information available on these topics in the PADB Technical and User documentation, available from the Auto Care Association.

PIES TRAILER Segment

Z01- The **PIES TRAILER** Segment, is a mandatory segment for every PIES file, and simply provides a) a total count of the ITEM records being sent, and b) the date of the file. Only the Z15 element, Transaction Date, is mandatory.

Z01	Trailer Segment	KM		\<Trailer>	Example
Z10	Item Count	O	N1/6	\<ItemCount>	352

| Z15 | Transaction Date | KM | D | <TransactionDate> | 2009-01-03 |

To close out the Product Attribute File, although Z10, Item Count, is optional, we recommend including this in the file to make it easier for your trading partner and you to actually validate the number of records sent.

In summary, use the following basic fields:

- Z10 – Item Count

- Z15 – Transaction Date

Putting it All Together – Sending Product Attributes in the PIES Standard

Of the over 300 PIES Attributes available, there are only 19 which are required to send Product Attributes. Here is the list:

#	Field Name	Req	Format	XML Elements and Attributes	Example
A01	Header Segment	KM		<Header>	
A02	PIES Version Number	M	ID3/5	<PIESVersion>	6.5
A03	Submission Type	M	ID4/6	<SubmissionType>	FULL
A05	Blanket Effective Date	O	D	<BlanketEffectiveDate>	2009-01-03
A13	Parent AAIAID	O	ID4	<ParentAAIAID>	BBCD
A20	BrandOwner DUNS or DUNS+4	E	ID9/13	<BrandOwnerDUNS>	88888888844441
A21	BrandOwner GLN	E	ID13	<BrandOwnerGLN>	7777777771234
A40	Technical Contact Name	O	AN1/60	<TechnicalContact>	John Smith
A41	Contact Email	O	AN1/254	<ContactEmail>	john@smith.com
B01	Item Segment	KM		<Items>	
B02	Maintenance Type	M	ID1	MaintenanceType	A
B15	Part Number	KM	AN1/48	<PartNumber>	HOS101
B20	Brand AAIAID	M	ID4	<BrandAAIAID>	BBBB

B64	Part Terminology ID	O	ID4/5	<PartTerminologyID>	55555
F01	Product Attributes Segment	O		<ProductAttributes>	
F02	Maintenance Type	M	ID1	MaintenanceType	A
F05	Attribute ID (Type)	KM	AN1/80	AttributeID	1141, when F07=Y; Friction Material Thickness, Inner Pad, when F07=N
F07	PADB Attribute	M	ID1	PADBAttribute	Y
F08	Attribute UOM	O	AN1/20	AttributeUOM	mm (UOM Code, NOT UOM LABEL)
F10	Attribute Data	M	AN1/2000	<ProductAttribute>	7
Z01	Trailer Segment	KM		<Trailer>	
Z10	Item Count	O	N1/6	<ItemCount>	352
Z15	Transaction Date	KM	D	<TransactionDate>	2009-01-03

XML Use Case Example

The following examples represent how to create the XML to send product attributes in PIES. One example uses Custom Attributes; the other uses the Product Attribute Database (PADB)

Example 1 – Custom attributes sent in PIES (Vendor Brand WWWW, fictional PCDB ID 19999)

USE CASE: Sending three non-PADB attributes for an Item (Part Number 1234 - Widget), using the following custom attributes:

Widget Length = 12.5 inches

Widget Width = 4.25 inches

Widget Height = 3.5 inches

Sample PIES XML

```
...
<Items>
        <Item MaintenanceType="A">
```

```
<PartNumber>1234</PartNumber>

        <BrandAAIAID>WWWW</BrandAAIAID>

        <PartTerminologyID>19999</PartTerminologyID>

    <ProductAttributes>

    <ProductAttribute

        MaintenanceType="A"

        AttributeID="Length"

        PADBAttribute="N"

        AttributeUOM="IN">12.5</ProductAttribute>

    <ProductAttribute

        MaintenanceType="A"

        AttributeID="Width"

        PADBAttribute="N"

        AttributeUOM="IN">4.25</ProductAttribute>

    <ProductAttribute

        MaintenanceType="A"

        AttributeID="Height"

        PADBAttribute="N"

        AttributeUOM="IN" >3.5</ProductAttribute>

    </ProductAttributes>

    </Item>

</Items>

...
```

Example 2 – PADB attributes sent in PIES

USE CASE: Sending multiple PADB Attributes for an Item (Part Number 9876 – Brake Caliper), using the PADB definitions for Disc Brake Caliper attributes (Vendor Brand ZZZZ, actual PCDB ID - 1704)

Example PADB Data

PAID	Attribute Name (PADB)	Description of Use (PADB)	Attribute Type (PADB)	Unit of Measure Code (PADB)	Value (Actual Value or from List of Valid Values in PADB)
54321	Mounting Hardware Included	Does this product include its mounting Hardware	Text	-	Yes|No are the Valid Values from the PADB Table. <Yes> is the desired value
54322	Caliper Type	Describes how the Caliper is designed	Alphanumeric	-	These are the Valid Values from the PADB Table. Anette Design|Fixed Monoblock|Fixed 2pc|Fixed 3pc|Slider|Slider w/ Mechanical Parking Brake|Slider w/ Electric Parking Brake|Mechanical Parking Brake Only <Slider> is the desired value
54323	Inlet Port Diameter		Numeric, length 6, 3 decimals	IN	0.750
54324	Piston Quantity		Numeric, length 2	-	1
54325	Piston Size 1	Piston Diameter	Numeric, length 6, 3 decimals	IN	1.375
54326	Bleeder Thread Size	Size of the thread on the bleeder port and	Alphanumeric, length 10		3/8x24

		diameter. Examples 7/16x20 - 3/8x24 - 10x1.0 - 10x1.5			
54327	Caliper Casting Material	Defines the casting material	Text	-	Valid Values from the PADB Table: Cast Iron|Aluminum|Magnesium|Composite <Aluminum> is the desired value

Sample PIES XML

```
…
<Items>
    <Item MaintenanceType="A">
        <PartNumber>9876</PartNumber>
            <BrandAAIAID>ZZZZ</BrandAAIAID>
            <PartTerminologyID>1704</PartTerminologyID>
        <ProductAttributes>
            <ProductAttribute  MaintenanceType="A"
             AttributeID="54321"
             PADBAttribute="Y">Yes</ProductAttribute>
        <ProductAttribute
            MaintenanceType="A"
            AttributeID="54322"
            PADBAttribute="Y" >Slider</ProductAttribute>
        <ProductAttribute
            MaintenanceType="A"
            AttributeID="54323"
            PADBAttribute="Y"
            AttributeUOM="IN">0.750</ProductAttribute>
```

```
<ProductAttribute

        MaintenanceType="A"

        AttributeID="54324"

        PADBAttribute="Y">1</ProductAttribute>
<ProductAttribute

        MaintenanceType="A" AttributeID="54325"

        PADBAttribute="Y"

        AttributeUOM="IN">1.375</ProductAttribute>
<ProductAttribute

        MaintenanceType="A" AttributeID="54326"

        PADBAttribute="Y"3/8x24 </ProductAttribute>
<ProductAttribute

        MaintenanceType="A" AttributeID="54327"

        PADBAttribute="Y">Aluminum</ProductAttribute>
</ProductAttributes>
</Item>
</Items>
…
```

Companion Documents

There are a number of additional documents on the topic of Product Attributes which will help you create your PIES files. Visit www.aftermarket.org/Technology for more information.