Introduction to the NAAA ECR Standard

Prepared for the NAAA by:

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Version 0.9

1.0 Introduction

1.1 About NAAA and the ECR Standard

Founded in 1948 the National Auto Auction Association represents more than 324 auto auctions both domestic and international, with more than 9.5 million units sold each year.

In 2009, the NAAA undertook to develop an Electronic Condition Report (ECR) Standard for its Auction Members and value chain partners.

The ECR standard was developed in order to bring harmony to the automotive remarketing industry. Currently, there are many different ways to develop an Electronic Condition Report (ECR). All the participants prior to the standard were creating their own condition reports.

This created a variety of issues and inefficiencies, such as the same vehicle for sale at different auctions would produce a different condition report for the buyer. Having a vehicle would change hands from one auction house to another would create problems in mapping the existing CR information, as any clearinghouse such as AutoIMS would need to be a superset of everyone's approach to condition reporting. The information was not all standard.

In a time in a global macroeconomic environment for the automobile industry when greater efficiencies are needed, NAAA decided that it was time to develop a standard that would bring benefit to all groups. This standard would allow greater flow of information between all the parties involved.

1.2 This Document

This document is meant as an accompanying document that provides semantic details or context to the accompanying information (e.g., the angle of a given image described in the standard that cannot be embodied in the standard itself). The details in the accompanying documents, an Excel document in largely English readable format and a series of XML schema specification documents, largely intended for a strictly technical Information Technology audience, comprise the current version of the standard.

1.3 Standardization Process

The standardization of an ECR required discussions with many different groups involved in automotive remarketing. This document and attached standards specifications represents the current working output of that group.

1.4 ECR Sections

The ECR standard is divided into major groupings of vehicle identification:

- Header
- Basic Vehicle
- Image
- Vehicle Options
- Damages
- Tires/Wheels
- Miscellaneous
- Technical

1.5 More Information

The latest version of the standard is maintained on the NAAA website at http://www.naaa.com. For more information or inquiries about the standard, please contact:

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2.0 Header

2.1 Introduction

The header section of the Standard will be used to determine the historical setting in which this inspection occurred. As multiple iterations of the standard emerge, this section will be essential for determining which values are being used in the ECR.

2.2 Definitions

ECR Type – whole vehicles are the most common, as this denotes an operational vehicle. Salvage is selected only if this vehicle is damaged and in such a state that it will be sold for parts. Version 1.0 of the standard will not support salvage condition reports.

Vehicle Type – Of the four types given, only Cars and Light Trucks are available for version 1.0 of the NAAA ECR standard. A light truck is defined as having a payload of less than 4,000 pounds.

Universal Vehicle Code – This is used by Black Book for identification purposes. This is a proprietary value that is only used by Black Book

Style ID – This is a unique identifier used by Chrome. This is a proprietary value that is only used by Chrome to identify a vehicle and its attributes.

3.0 Basic Vehicle

3.1 Introduction

The basic vehicle section of the ECR is meant to establish the basics of the vehicle to be inspected. This is not sufficient to determine the value of a vehicle, as there can be options and damages. Basic vehicle provides a clear picture of what vehicle is being sold at the auction, even if images were not present.

3.2 VIN Fields

The Vehicle Identification Number (VIN) is the single most important piece of information for a vehicle. This 17 digit combination is used on all vehicles by the original engine manufacturers (OEM). The alphanumeric combinations vary widely by company. Only 8 digits of the VIN are required to accommodate older vehicles.

Many adopters of the standard ECR will choose to use a third party to handle their VIN information. Through many years of industry knowledge, two companies have emerged as the leaders in this space. This is Black Book and Chrome. Their proprietary software takes the VIN and decodes the information to the available options for the given vehicle. This can be applied to the later fields, such as Make and Model. If a VIN decoder is used, this can be noted within this section of the ECR standard.

3.3 Make, Model, and Subseries

This may be already known if a VIN decoder has been used. This is not always the case. Make, Model, and Subseries represent the level of vehicle within a manufacturer's lineup. Because of the limited amount of car companies in existence, Make is relatively easy to determine. Branding is such an essential element of the automotive world that manufacturers will do their best to ensure you know the Make within a very short amount of time. Couple Make along with the Model, and an inspector has a fairly definite idea of what they are dealing with.

Subseries can significantly alter the value of a vehicle. Within a model of vehicle, a manufacturer decides to issue different versions of the same vehicle. Typically a subseries is a special edition with additional attributes. These special attributes typically contain a special name to set them apart from the standard model.

3.4 Body Style

It is helpful to think of body style as the silhouette of the vehicle to be inspected. This section must be approached with caution, however, as many companies change the name of a vehicle for marketing reasons. When considering body style, it is important to ask a few questions:

- How many doors does the vehicle have?
- Can you remove the top?
- What sort of chassis is this vehicle on?

The answer to these 3 questions will allow you to determine which sort of vehicle you are dealing with.

3.5 Roof Type and Detail

When considering roof type, think of the various roof configurations that the vehicle is capable of. The most common of all roof types is a fixed hardtop. Within that designation, however, is the question of whether or not a moonroof/sunroof is present. Because of the ongoing discussion of the difference between a moonroof and sunroof, the standard has the inspector first note if an aperture is present, and then specifies whether the opening is metal or glass.

After determining whether or not a moonroof/sunroof is present, there are main roof groups: Hard Top, Convertible Top, and Other.

Hard tops are metal coverings that can be fixed, retracted, or removed.

Convertible tops are retractable and made of cloth. If they come with an optional covering, that is a convertible top with a boot.

The Other section of the roof types contains the unusual configurations. The most commonly used other roof type is “Hatchback” as this is not listed anywhere else within the standard.

3.6 Color

Color is one of the sections where simplification was absolutely necessary. Because the full spectrum has so many different colors, it was important to select basic versions of familiar colors.

The location on a vehicle where color is specified is within the Roof, the Interior, and the Exterior.

With roof color, this is mainly used when the roof type is a convertible, as the fabric may be a different color from the vehicle.

Inspectors may make two selections for exterior color. This is in case a vehicle has more than one color on the body. When a two-tone paintjob occurs, the top color is selected for “Exterior Color 1” and the bottom color is “Exterior Color 2”

With interior color, the determining color is which is the more dominant. The main color is considered the dominant color, and is therefore labeled as “Interior Color 1.” The less prominent color or the accent color is noted as “Interior Color1”

If a vehicle contains only one color for the interior or exterior, then no second color selection is necessary.

3.7 Odometer

Odometer readings represent a vital piece of information in determining a vehicle’s value. For the standard, there are a few other points to include besides the reading. Additionally, it is important to note if the odometer is digital or analog, how many digits are present, and whether the reading is in kilometers or miles.

3.8 Engine Details

There are several important details that relate to the vehicles’ engine. The standard includes several fields that are important for classifying a vehicle. The first aspect is fuel type. While a majority of vehicles

are still gasoline or diesel, this section accommodates for new emerging technologies, such as hybrid and electric vehicles.

The three important aspects are: cylinders, displacement, and add-ons. Displacement is typically measured in the metric liters. However, some older vehicles still go by their imperial displacement. To accommodate older vehicles, the scale of the displacement must be noted by specifying either liters or cubic inches. Engine add-ons include such items and turbo kits and superchargers.

4.0 Image

4.1 Introduction

With the Images, it is important to keep in mind that there are different locations where an image can be taken, as well as the appropriate formats and sizes. Within the current standard, there are only 3 required images: left front corner, right rear corner, and front interior. Additionally, there are 4 recommended images: odometer, Dash, Wheel, and VIN/ID manufacturer label. If damages are to be reported on the vehicle, any damage that exceeds $200 must be photographed as well. Clients may require more than the 8 images recommended. If that is the case, it is at the expense of your client as that is not required by NAAA.

4.2 Image Guidelines

The left front corner image is to be taken from the driver's side. The inspector should stand a few steps away from the vehicle, looking directly at the front left fender. This image should provide a clear view of the fender, the hood, the windshield, and a partial view of the side of the vehicle. This should give potential buyers a sense of the front end of the car.

The right rear corner image is to be taken from behind the passenger side of the vehicle, looking towards the driver. This image is supposed to give a good depiction of the rear end of the vehicle.

The front interior image will let buyers know the condition of the vehicle on the inside. Typically this is taken from the driver side, with the possibility that it may include a shot of the odometer reading. That is another image, but it is not required.

Once an image is taken, it will be stored for 6 months in real-time to allow for any arbitration issues that may emerge. After the 6 month time period, it will be archived for 7 years.

All images are to be taken in the JPG format, with not less than an XX% lossy compression at a minimum.

There are two resolutions recommended by NAAA: 640 x 480 and 1024 x 768. If a client requests a different resolution, it is accommodated outside of a standard condition report.

5.0 Vehicle Options

5.1 Introduction

Customization is what makes a vehicle unique. Unfortunately, it makes the life of an inspector more difficult. Options are important because they can change the value of a vehicle. Options are defined as any items present in a vehicle that are not available in the base model. There are two types of options: OEM options and Non-OEM options. OEM options are vehicle upgrades available from the factory, and

are usually noted with a different subseries. Non-OEM options can be almost anything. Because they are not limited by the original manufacturer, this list is nearly endless.

5.2 Determining Options

Options are either located in the interior or exterior of the vehicle. Exterior options typically include items such as spoilers, decals, window treatments, light assemblies, and body panels. Interior options are usually different trim options, navigation, and audio equipment.

Once an option is determined to be OEM or not, it is then labeled as interior or exterior.

It is important to note that options may be handled by a third party. For example, Chrome or Black Book may provide a list of available options for this vehicle. A list of the options will be maintained by the third parties to ensure proper collaboration.

6.0 Damages

6.1 Introduction

Cataloging damages is important because they can make a big swing in what a vehicle will fetch on the auction block. It is why damages must be chronicled in a thorough manner. Damage is considered properly reported if the condition report answers the following questions:

- Where did the damage occur?
- What type of damage is it?
- How bad is the damage?
- What do recommend we do about the damage?

In addition to standard damages such as dents and scrapes, there are certain items that require special attention. These cases are called “special disclosures” and are announced at the auction at the time of sale.

6.2 Cataloging Damages

To begin capturing damage, the first aspect is where it is present. To properly classify, the ECR has six unique “Item Classes.” After item class has been determined, an inspector notes Damage Detail, Severity, and Recommendation. Paired with all this information is the damage item itself, which is mapped within the ECR standard.

6.2.1 Item Classes

Exterior – This covers any item that is visible from the outside when the doors of the vehicle are closed. A good example of this would be a scraped roof.

Interior – This includes any vehicle aspects that are visible from the inside of the vehicle when the doors are closed. Common damage to the interior includes scraped dashboards or ripped upholstery.

Glass – Any damage to the glass surfaces of the vehicle are to be noted here. This would include a chipped windshield and a broken driver's side window.

Tires – Any unusual damage to the tires are to be noted here. This does not include normal wear and tear that occurs with regular driving. This is where exceptional damage is noted, such as punctures or gouges.

Mechanical – Any mechanical aspect of the vehicle that is not performing as it should is noted within this item class. This could mean anything from a leaking radiator to a dead battery. If it impairs the vehicle so that it can't function properly, it is considered a mechanical damage.

Accessories – Accessories include navigation, heads up display, and audio visual equipment. If any of these items are not working, they are to be noted within this item class.

6.2.2 Damage Detail

Once we know the nature of the damage, it is time to include more detail. The ECR contains a mapping of over 1000 items that can be identified as having damage. Once the item is selected, the internal logic will provide a set list of possible damage details. The damage detail list represents the most common damages for that selected item. For example, if you select a left front quarter panel, the damage details include: broken, cracked, dents, and scratches.

6.2.3 Damage Severity

After noting where the damage occurred, it is time to determine the extent of the damage to the item. This is typically a number or a measurement, depending on the damage selected. The numeric values are for multiple damages of the same type. For example, if there are four dents on a right rear quarter panel, the inspector will select exterior (item class) > dented (damage detail) > 4 (severity).

The list of damage severity also contains a series of measurements. This is used to quantify the size of a particular damage. Depending on the client, they may request different levels of precision. For clients that do not have a particular preference, the standard includes 3" increments to ease the workload of the inspector. For those clients requiring very exact measurements, there are values for damage severity that include single inch increments.

6.2.4 Damage Recommendation

After fully quantifying the damage, the inspector will then give a suggestion of the recommended action. The inspector's recommendation does not need to be implemented immediately, but it should be taken as reputable advice. The recommendations are a list of actions that are fairly standard for a damage of that type. While recommendations may vary between inspectors, these are merely suggestions. It is up to the auction and the buyer to determine what is to become of the recorded damages.

6.3 Special Disclosures

Special disclosures are divided into three sections: Individual Instance, Permanent, and Canadian Specific.

Per the Ontario Motor Vehicle Act, Canadian vehicles require certain conditions to be disclosed at the time of sale that may not be announced otherwise. Examples include: previous rental vehicle, previous driving school vehicle, and previous emergency services vehicle. This legislation is new, and more disclosures will be included in future versions of the ECR standard.

Individual instance disclosures are vehicles that have a unique condition that are only announced at that one time of sale. This means that these damages are often items that can be fixed. If the disclosed issue is repaired, that disclosure does not need to be announced at the next point of sale. And example would be the ABS light on. This represents an item that must be disclosed at the point of sale, but can be repaired before it is sold at a later time.

Permanent disclosures remain for the life of the vehicle. These are typically damages that can't be repaired and dramatically alter the price of a vehicle. Examples include fire and flood damage.

7.0 Tires/Wheels

7.1 Introduction

Tires and wheels are one aspect of a vehicle that changes very often. While the engine and the color may remain the same over the life of the vehicle, tires and wheels may change several times and with every new owner. Because of the dynamic aspect, tires and wheels have their own section with which to classify the rims attached to the vehicle, and the rubber that wraps them. Any damages that were noticed on the tires and wheels were to be noted in the previous section. This section of the standard is only to identify unique wheels and tires that may change the value of the vehicle.

To begin in this section, an inspector must first select the wheel position. Each wheel and tire must be individually selected and identified. In cases of larger trucks where dual wheels are present in the rear, an inspector will select "dual rear right" and "dual rear left."

The two most important pieces of information for tires are tread depth and tire size. Tread depth is measured in 32nds of an inch. Tread depth is measured from the deepest part of the tire groove to the portion that sticks out the most. Tire size is the three set of numbers and letters facing the outside of the tire. An example of a tire size is 225/70R14. The first number in the code "225" represents the tire width in millimeters, this is followed by the aspect ratio "70" which is the height of the side wall expressed as a percentage of the width. R stands for radial and relates to the tire construction. The final number in the code "14" is the rim size measured in inches.

8.0 Miscellaneous

8.1 Introduction

The miscellaneous section of the ECR standard represents any other notes on the vehicle that do not fit into the previous sections. The main aspect within this section was whether or not a test drive was performed. As this is not a requirement for an inspection, any additional information related to a test drive is optional.

The two required fields within the Miscellaneous section are the NAAA standard grade and odor. With odor there are only three designations: Yes, Yes-Smoke, and No. Because scent is subjective, odor implies any strong unpleasant scent. Smoke is called out here because it is the easiest to determine. There are only these three to assuage arbitration concerns due to opinion.

The NAAA standard grade is a number from 0 – 5 that indicates the overall vehicle condition. A grade of 5 would comply with the NAAA guidelines for a "5" rating, which would be a near pristine, like-new

vehicle. If a vehicle has a 0, it would likewise qualify with lowest rating, e.g. a salvage vehicle or in very poor condition.

The NAAA will look to support decimalized versions of the NAAA grade in future versions as the NAAA works to standardize such a definition.

9.0 Technical

9.1 Technical Notes

Along with the valid values, there are XML specification and files to accompany the standard. The long-term goal of the NAAA is to facilitate transmission between participants in the industry value chain.

NAAA Notice by Executive Director Frank Hackett

Note: The XML specification and files will be posted to the NAAA website no later than August 1, 2009.