



**Technical Training Bulletin**

**MAPPING FORMS**

**MAPPING FORMS**

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MAPPING FORMS

1. Introduction

After Product Development completes a form that will have information input electronically and will be printed out of an online platform, it needs to be "mapped." Mapping a form is done so that someone using an online platform can populate a text field with accurate information necessary to fill out the form or check appropriate check boxes before printing the form out.

The mapping process consists of adding text fields and check boxes, known collectively as "form fields," to the PDF version of a document. Currently, the mapping system in Toro supports only two types of fields: simple and complex fields. A text field is an example of a simple field, but not all text fields are simple fields. A check box is an example of a complex field (for more information about simple and complex fields, see Sections 3.B., 3.C., and 4.B.).

Before Mapping

After Mapping

This Technical Training Bulletin will show you which tools and documents you need to map a form, how to map automotive forms before and after uploading them to Toro (see the "UPLOADING FORMS TO TORO" Technical Training Bulletin regarding uploading forms to Toro), how to use a rate ID to help you map a form correctly, and how to map home warranty forms.

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**2. What is Needed to Map a Form**

To map a form, you will need the materials and programs listed below:

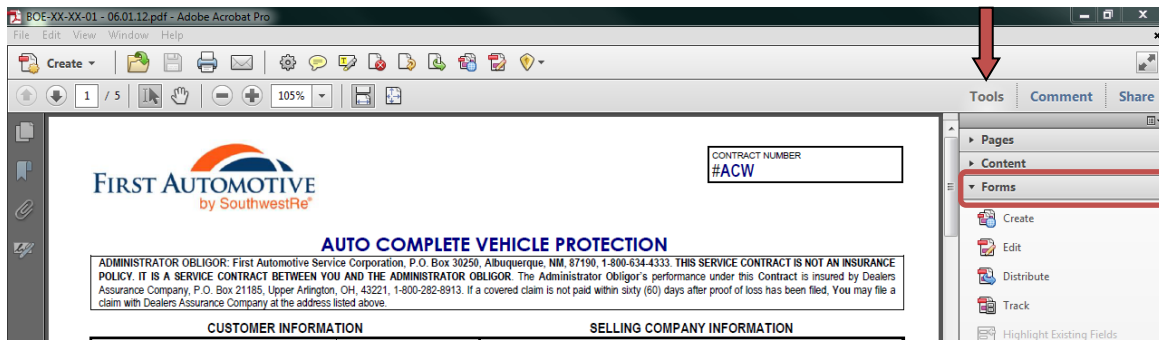
- The finalized PDF version of the form you are mapping
- The rate IDs that correspond to the form that you are mapping (Underwriting should provide these to you)
- Access to the **Plan Code Tables** Excel spreadsheet, which contains all of the field names and descriptions supported by Toro. If you do not have this spreadsheet, you can request a copy from the IT department.
- Microsoft Excel
- Microsoft Word
- Adobe Acrobat X Pro (this Technical Training Bulletin uses version 10.1.3 in all examples)
- Toro v.3.0.7 (this Technical Training Bulletin uses v.3.0.7 running on Windows 7 Professional)

**3. Process for Automotive Forms**

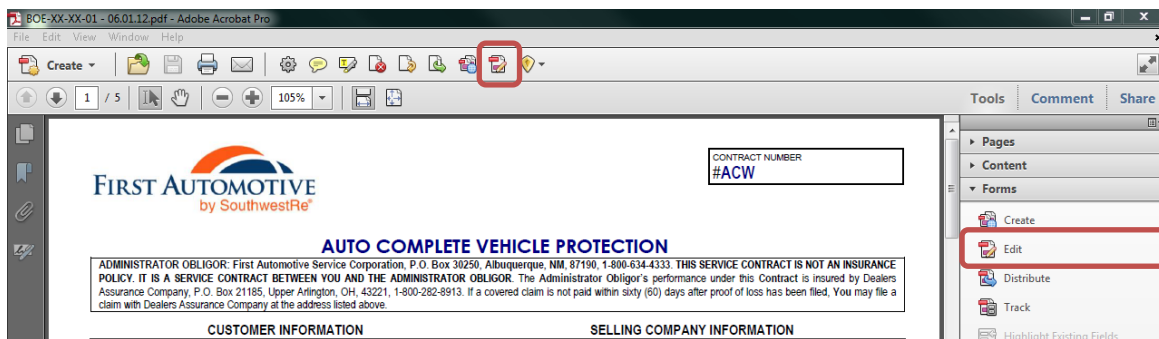
The processes listed below will show you how to add form fields, edit simple and complex field properties, use the rate ID to determine appropriate ID numbers for complex fields, prepare a form for mapping after it has already been uploaded to Toro, and request new fields from the IT department. Please take note of all red markings on screenshots throughout this bulletin, as they show important information.

**A. Adding Form Fields**

1. Open the PDF version of the form in Adobe Acrobat X Pro.
2. Click the **Tools** button in the toolbar and click the **Forms** drop-down list box. NOTE: the location of all buttons and menus may vary depending on which version of Adobe Acrobat Professional is installed on your computer.



3. Click **Edit**. If you will be mapping forms often, you should add a toolbar shortcut for the edit button by right clicking **Edit** and selecting **Add to Quick Tools**. This will allow you to skip the previous step. NOTE: depending on what version of Acrobat you are using, there may not be an **Edit** option.



4. The **Add or Edit Form Fields** dialogue box will appear with the following prompt: “Currently there are no form fields in this PDF. Do you want Acrobat to detect form fields for you?” Click **No**. NOTE: If you click **Yes** instead of **No**, Acrobat will automatically place text fields and check boxes in the places it believes they should be placed. If you allow Acrobat to place text fields and check boxes, you *must* delete any extra form fields that you do not need (e.g. a text field for the signature line).

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- Determine whether you will need to use a text field or a check box for the section you are mapping. To do this, you must consider the function of the field you will be mapping. If a field will have text or numbers displayed in it (e.g. the name of a customer or dollar amount of the contract price), then use a text field. If the field needs to show a binary value (e.g. yes or no), or to select a certain option (e.g. coverage type selected or surcharges), use check boxes. See below for examples of the types of fields in which you would place text fields and check boxes.

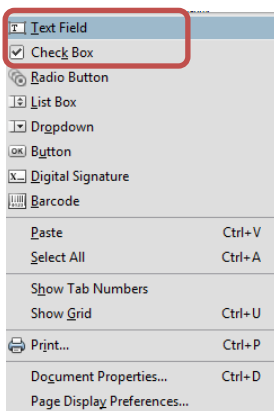
**Text Fields**

Last Name		First Name	
Address			
City	State	Zip	

**Check Boxes**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
POWERTRAIN	STANDARD	HIGH TECH	COMPREHENSIVE	WRAP

- Under the **Tasks** list, click the **Add New Field** drop-down list. For the purpose of mapping a form, you should click only either **Text Field** or **Check Box**. You may also right-click anywhere in the document and select the field type you need from the list box that appears as shown below.



- Once you select the type of form field you want to insert, a set of blue crosshairs will appear where the cursor is pointing. Click and drag the cursor to draw the form field in the appropriate section of the form. Each text field and check box should fill the area where you place it as completely as possible without overlapping the borders or any text that happens to be in that field. See below for examples.

**Text Fields**

Last Name	Text1	First Name	Text2
Address			
Text3			
City	Text4	State	Text5
		Zip	Text6

**Check Boxes**

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
POWERTRAIN	STANDARD	HIGH TECH	COMPREHENSIVE	WRAP

- Repeat **Steps 5, 6, and 7** until you have inserted all form fields for all of the necessary areas of the form.
- To make the text fields and check boxes function correctly with Toro, you must edit their properties. To access these properties, double click the text field or check box. If you want to edit properties as you create form fields (before creating a new form field), click the **All Properties** hyperlink, which is blue and underlined. See **Sections 3.B., 3.C., and 4.B.** for more information on how to edit properties of form fields.

Address			
Text3			
City	Text4	State	Text5
		Zip	Text6
Telephone	Text11	E-mail Address	

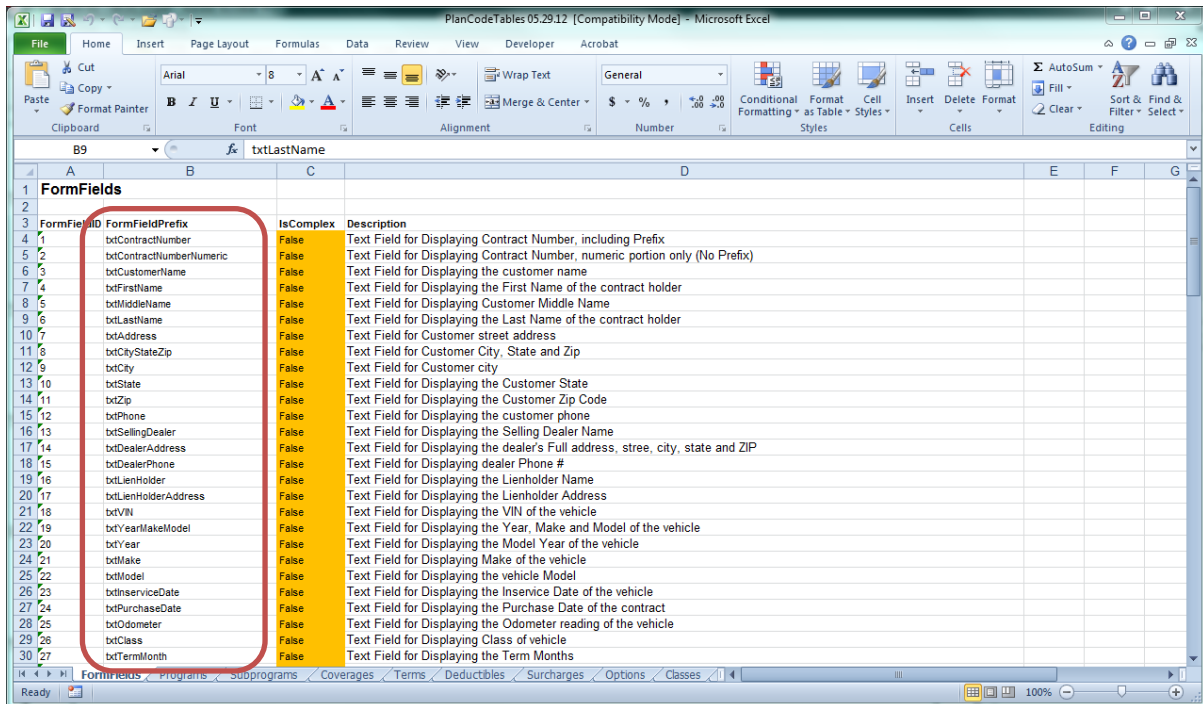
Field Name:	VEHICLE
Text11	
<input type="checkbox"/> Required field	<a href="#">All Properties</a>
	Class

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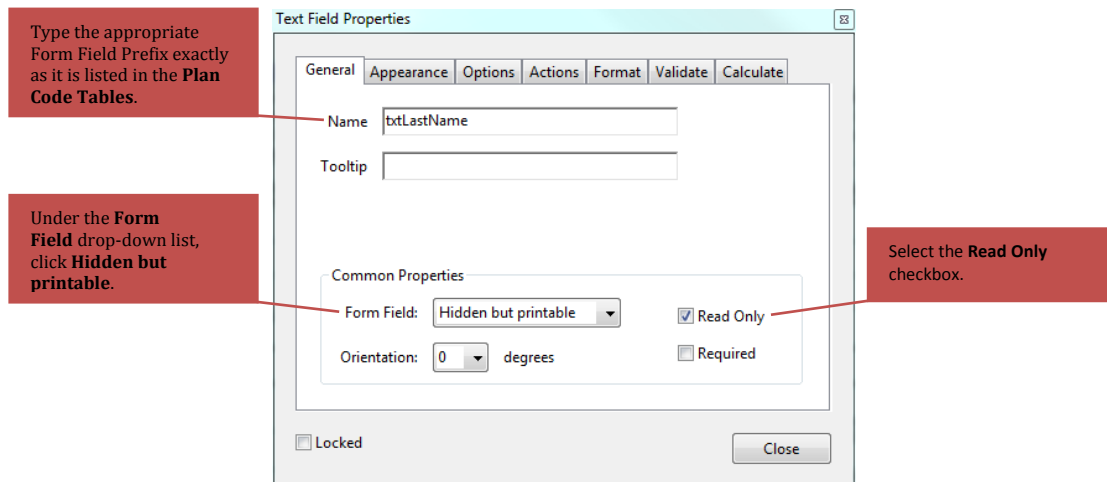
**B. Editing Text Field Properties as Simple Fields**

Simple fields are form fields that display information input from online platforms in text form (e.g. the customer’s name, the dealership’s address, or the VIN of a vehicle). As of the time of this writing, only text fields are simple fields, so this section will use text fields in these examples. To edit the properties of simple fields, complete the steps below.

1. Open the current **Plan Code Tables** spreadsheet in Excel.
2. Click the **FormFields** tab if the spreadsheet did not open directly to the **FormFields** sheet.
3. Use the information in the **Descriptions** column to help you select the appropriate name from the **FormFieldPrefix** column. Note that the **IsComplex** column reads as “False” for simple fields. Text field names always begin with the prefix **txt**. The form field should be named exactly as it is listed in the **FormFieldPrefix** column on the **Plan Code Tables**. No extra characters should be written into the **Field Name**.

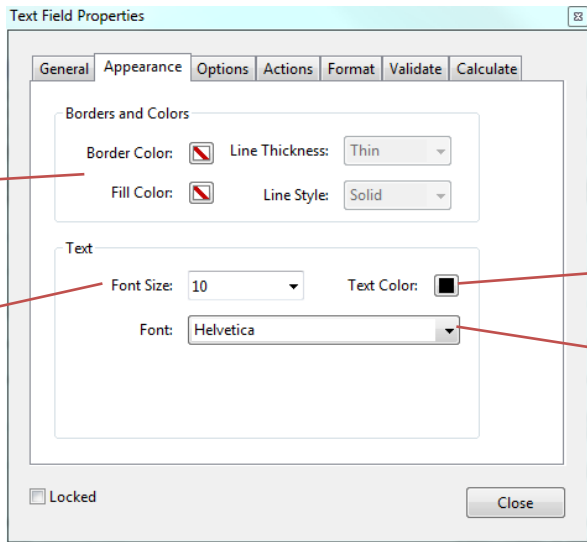


4. Set the properties for the text field you inserted in **Section 3.A.** as illustrated below (NOTE: If an option in the **Text Field Properties** window is not mentioned specifically, it may be disregarded):
  - a. Under the **General** tab:



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b. Under the **Appearance** tab:



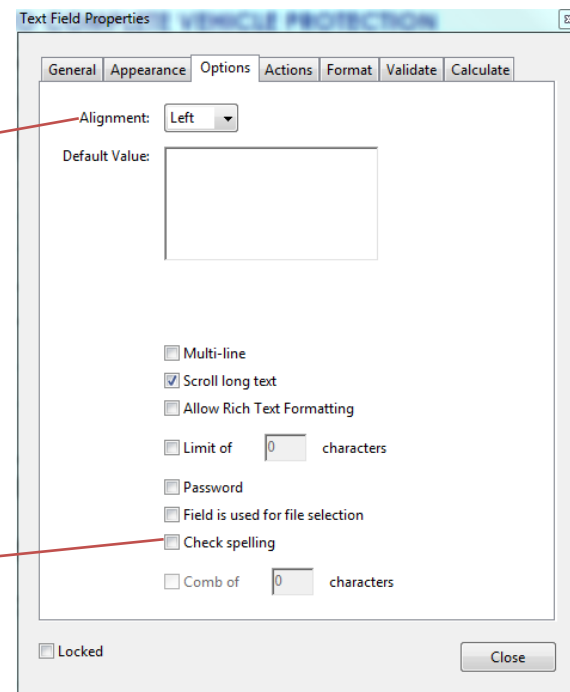
Under **Border Color** and **Fill Color**, click **No Color**.

Under the **Text Color** group box, click **Black**.

Under the **Font** drop-down list, click **Helvetica**.

Under the **Font Size** combo list, enter **10**. Enter **Auto** if the text box is very large or small, or you think the information will not fit with size 10 font.

c. Under the **Options** tab:



Leave the **Alignment** as **Left** unless the formatting of the form requires **Right** or **Center** alignment.

By default, the **Check Spelling** option should be selected. Select the **Check Spelling** check box to disable the spell check option.

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d. Under the **Format** tab:

**If the text field is a date**

Under the **Date Options** list, click **mm/dd/yyyy**.

**If the text field is a number**

Under **Decimal Places**, click **2**.

Under **Separator Style**, click **1,234.56**.

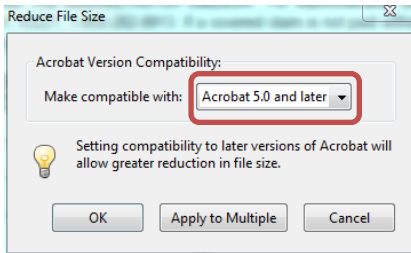
Under **Currency Symbol**, click **None**, unless the number is a dollar amount. In that case, click **\$** and under **Symbol Location**, click **Before with space**.

For most number-related fields, click **Number**.  
**NOTE:** Most contracts that you map for use in Toro will have a section for a contract number. Do not select **Number** for the contract number text field. Under **Select format Category**, click **None** for the contract number field.

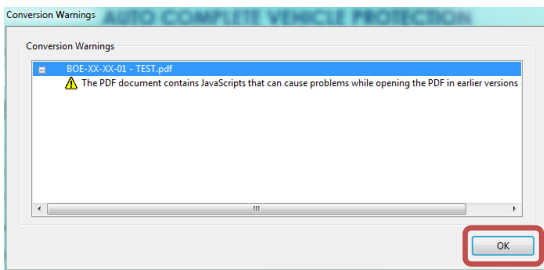


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5. Click **Close** after editing all of the above listed properties for the simple field.
6. Edit all the properties of all the simple fields in the form as shown in **Step 4**. Every simple field should have a different name selected from the **Plan Code Tables** spreadsheet that corresponds with the intent of that section of the form.
7. Under the **File** menu, click **Save As**, and then click **Reduced Size PDF...** The **Reduce File Size** window will appear.
8. Under **Make compatible with:**, click **Acrobat 5.0 and later**. Doing this reduces the likelihood of any errors or glitches occurring when someone using an older version of Adobe Acrobat attempts to open the file.

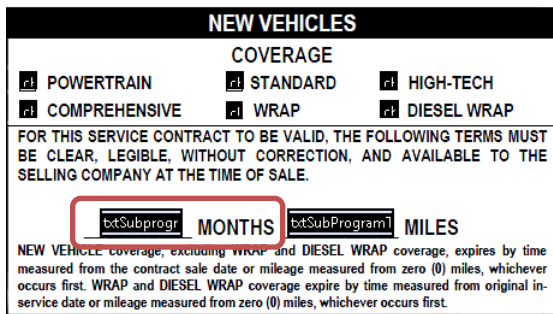


9. Click **OK**. The **Conversion Warnings** window may appear; if it does, click **OK**.



**C. Editing Text Field Properties as Complex Fields**

While simple fields are always text fields, not all text fields are simple fields. Non-simple fields are called **Complex Fields**. The only difference between simple and complex text fields is the naming structure in the properties (all other properties as shown in **Section 3.B**. remain the same for complex text fields). The naming structure of complex text fields includes more information than simple text fields. The additional information is shown using **ID numbers**, which are one to three digit numbers that represent many different programs, terms, coverages, and other information found in the **Plan Code Tables** spreadsheet. Name complex text fields using the following structure: (for this example, we will map the term months from form BNV-XX-XX-01 shown below):



1. Text field names always begin with the prefix **txt**. Because we want to include the **New** subprogram and term months, the text field name will be **txtSubProgramTermMonths**, which is listed under the **FormFields** tab of the **Plan Code Tables**.
2. Use a **colon (:)** to separate the text field name from ID numbers.

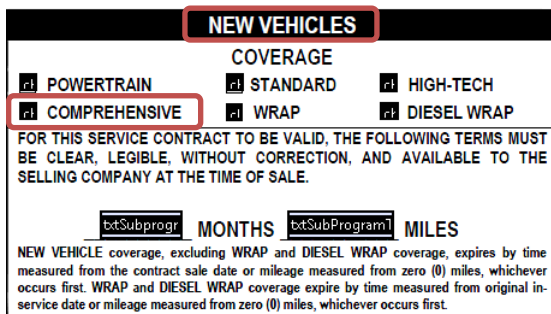
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3. Find the appropriate ID numbers under the **Subprogram** tab in the **Plan Code Tables**. See **Section 3.E.** for more information on choosing ID numbers.
4. Add all appropriate ID numbers after the **colon**. Separate ID numbers with a **comma (,)** with no spaces between the ID numbers. In this example, the ID numbers correspond with the New subprogram (subprogram ID **1**) and the Wrap subprogram (subprogram ID **12**).
5. The full name for the complex field in this example looks like this: **txtSubprogramTermMonths:1,12**
6. Edit all other properties for text boxes as shown in **Section 3.B.**

**D. Editing Check Box Properties as Complex Fields**

In addition to text fields, complex fields can also be used to display information in check boxes. Check boxes have a binary status, rather than indicating text or numbers. Either the option that the check box represents is selected or it is not. For this example, this bulletin will show the process mapping a check box to show the subprogram, coverage, and term of a program.

1. Open the **Plan Code Tables** in Excel if you do not already have it open.
2. Click the **FormFields** tab if you are not already working in the **FormFields** sheet.
3. Select the FormFieldPrefix from the **FormFields** tab that corresponds to the check box you want to map. You can use the descriptions to help determine which FormFieldPrefix is appropriate. Note that the **IsComplex** column in the **Plan Code Tables** reads as “True” for complex fields. If a form field does not say “True” in the **IsComplex** column, then you cannot use it as a complex field.
4. Open the PDF version of the form you are mapping if it is not already open.
5. Double click the check box whose properties you want to edit. The **Check Box Properties** window will appear. If you do not already have a check box in place, see **Section 3.A.** for more instructions on how to add a check box.
6. Name check boxes using the following structure: (for this example, we will map the check box that corresponds to the New subprogram with Comprehensive coverage from form BNV-XX-XX-01 shown below):



**NEW VEHICLES**

COVERAGE

POWERTRAIN       STANDARD       HIGH-TECH

COMPREHENSIVE       WRAP       DIESEL WRAP

FOR THIS SERVICE CONTRACT TO BE VALID, THE FOLLOWING TERMS MUST BE CLEAR, LEGIBLE, WITHOUT CORRECTION, AND AVAILABLE TO THE SELLING COMPANY AT THE TIME OF SALE.

MONTHS       MILES

NEW VEHICLE coverage, excluding WRAP and DIESEL WRAP coverage, expires by time measured from the contract sale date or mileage measured from zero (0) miles, whichever occurs first. WRAP and DIESEL WRAP coverage expire by time measured from original in-service date or mileage measured from zero (0) miles, whichever occurs first.

- a. Check box names always begin with the prefix **chk**.
- b. Because we want to include the subprogram and coverage as conditions for this complex field, the check box name will be **chkSubprogramCoverage**. This name is listed under the **FormFields** tab of the **Plan Code Tables** (at the time of this writing, it is the 32<sup>nd</sup> **FormFieldID**). The name **MUST** be written exactly as shown above, or it will not function in Toro.
- c. Find the appropriate ID number under the tab that matches the type of information you intend have the check box indicate in the **Plan Code Tables** (e.g. if you are mapping a check box for coverage, click the **Coverages** tab). See **Section 3.E.** for more information on this step.
- d. Use a **colon (:)** to separate ID numbers from the form field name.
- e. Add all appropriate ID numbers after the **colon**. See **Section 3.E.** for more information about determining the appropriate ID numbers to use. There are a few ways to input this information:
  - i. Separate ID types (e.g. subprogram ID and coverage ID) with **colons** (no spaces). E.g.: **chkSubprogramCoverage:1:4** indicates the New subprogram (subprogram ID **1**) and Comprehensive coverage (coverage ID **4**).
  - ii. Separate ID numbers corresponding to the same condition with **commas** (no spaces). E.g.: **chkSurcharge:13,14,121** indicates the surcharges listed here: business use for passenger vehicles (surcharge ID **13**); business use for trucks, vans, mini-vans, and SUVs (surcharge ID **14**);

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- and commercial use (surcharge ID **121**). All of these ID numbers correspond to the Commercial Use surcharge, so they all should be input to the name of the check box.
  - iii. If multiple values will make the condition true, group them together with **parentheses**.
  - iv. Use the symbol ~ to indicate that all values that are NOT in the preceding list (grouped with parentheses) will make the condition true.
  - f. The full name for the New (subprogram ID **1**) Comprehensive (coverage ID **4**) check box in this example looks like this: **chkSubprogramCoverage:1:4**.
7. Set the rest of properties for the check box you inserted in **Section 3.A.** as illustrated below (NOTE: If a field or option is not mentioned specifically, it may be disregarded):
- a. Under the **General** tab:

Type the appropriate FormFieldPrefix exactly as it is listed in the **Plan Code Tables**, then add ID numbers as shown in step 6.

Under the **Form Field** drop-down list, click **Hidden but printable**.

Select the **Read Only** checkbox.

- b. Under the **Appearance** tab:

Under **Border Color**, click **Black**. Under **Fill Color**, click **No Color**.

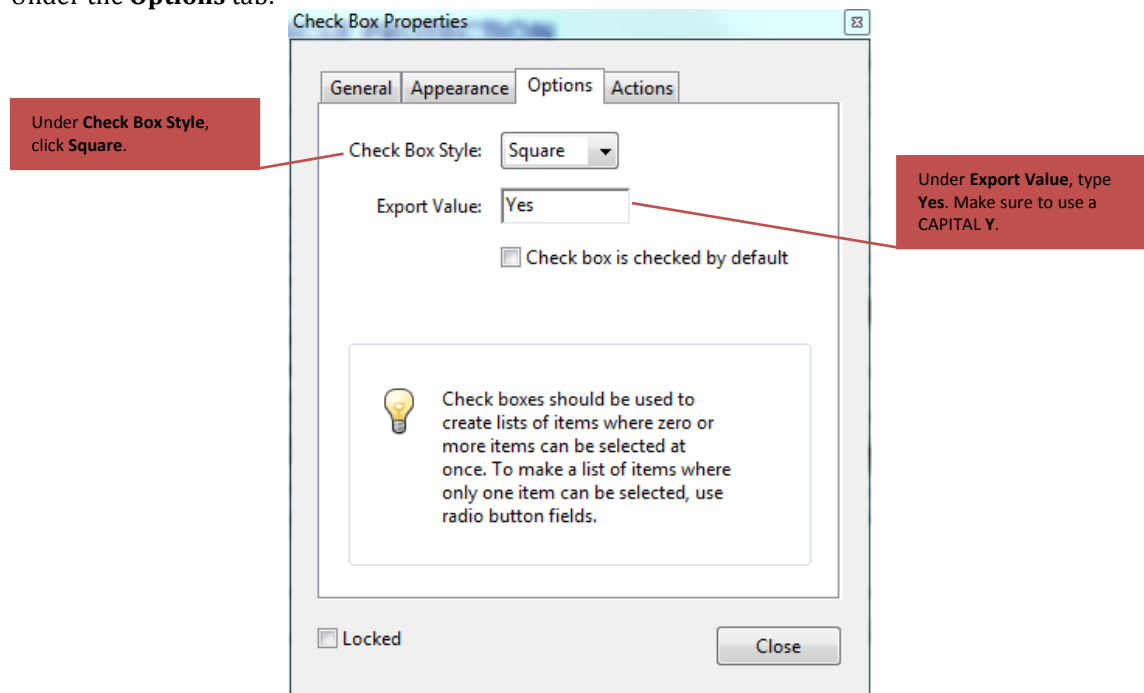
Under **Line Thickness** click **Thin**. Under **Line Style**, click **Solid**.

Under **Font Size**, click **Auto**. You **MUST** do this for the check box to populate correctly.

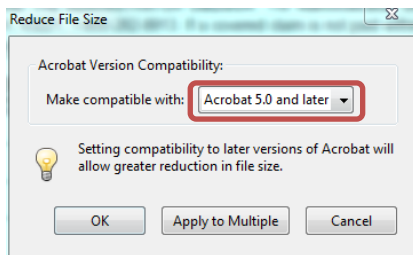
Under **Text Color**, click **Black**.

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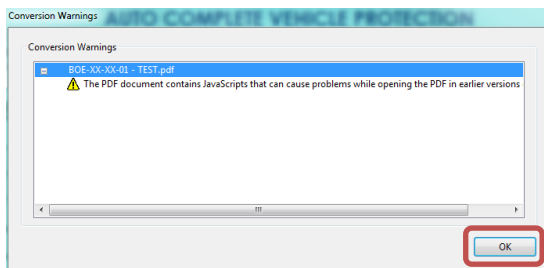
c. Under the **Options** tab:



8. Click **Close**.
9. Repeat **Steps 5-8** with the other check boxes until you complete editing the properties for all the check boxes you need to map.
10. Under the **File** menu, click **Save As**, and then click **Reduced Size PDF...** The **Reduce File Size** window will appear.
11. Under the **Make compatible with:** drop down list, click **Acrobat 5.0 and later**. Doing this reduces the likelihood of any errors or glitches occurring if someone using an older version of Adobe Acrobat attempts to open the file.



12. Click **OK**. The **Conversion Warnings** window may appear; if it does, click **OK**.



13. After mapping text fields and check boxes into the form and saving it, you are now ready to upload the form to Toro. Please see the "UPLOADING FORMS TO TORO" Technical Training Bulletin for more information.