

# Pre-Training Information

Understanding Thatcham Allowances and their use  
in Inter-est Vision

An abstract graphic at the bottom of the page consists of several overlapping, semi-transparent geometric shapes in shades of blue and grey, creating a layered, architectural effect.

Version Number 1.1

# Pre-Training Information

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## Vision and Thatcham data

Vision uses unedited times and part numbers supplied direct from Thatcham's Times System (TTS) and Thatcham's Parts System (TPS).

Thatcham divide repair operations into four main categories: MET, Panel, Paint & Corrosion Protection. Each panel selected in Vision will where applicable include time allowances from all 4 categories. Thatcham times are displayed in decimal hours where 1 hour contains 10 decimal units; i.e. 0.1 hr = 6 minutes. The minimum published time for a panel however will be 0.3 hours.

## MET – Mechanical, Electrical and Trim

This is the allowance for the removal & refitting of undamaged mechanical, electrical and trim components necessary to complete an operation and observe all the relevant Health and Safety requirements. Where a welding operation is involved, the battery and alternator must be disconnected to avoid risk of damage to these items. Each manufacturer's recommendations are taken into account, including any instructions in respect of other electrical items such as SRS modules and ECUs the times for such operations are automatically included. Items are removed as an assembly where possible, such as in the case of Radiator if it is to be removed and replaced during the course of a repair, time is included with the appropriate panel. However, if the radiator has to be renewed because of damage, time is not included for the dismantling and reassembly of the radiator components such as cowls and fans. Where this is necessary, an opinion time should be agreed between the estimator and the assessor.

## Panel

This is the allowance for the Removal and Replacement of a NEW metal panel. – Welded or Bolted. In some cases a panel may not be fitted as supplied or may need sectioning to facilitate the repair. Always refer to the Thatcham Methods Manual, where possible, by clicking on the escribe icon in Vision.

## Paint

This is the allowance for preparation and painting of NEW panels, included is the time to mix the paint, apply guide coats and test panels, gun cleaning, stone chip and sealer application where necessary. The paint times published reflect the use of a fully dry-flatted process, the application of a high solid two-pack material and the requirements of current EPA regulations.

Adjustment to times may be needed if an alternative method is used. The times include the sealing of exterior joints between primer and colour application. Other operations such as matt black and stone chip primer applications are also included, where necessary.

Paint times reflect the service condition of panels which are finished in an E-coat primer that requires minimum preparation before the application of a paint system.

## Corrosion Protection

This is the allowance for application of Corrosion Protection. Where a manufacturer gives a corrosion protection guarantee and has issued specific instructions and methods for treatment following accident repairs, these will be applied. In addition, the inner surfaces of MIG welded joints are treated with cavity wax material recommended by the manufacturer after repair, whether this is part of the production process or not. For each panel that has a published application time there may be up to 3 different stages or applications these being:

- Cavity Protection
- Underbody Wax
- Underbody Vinyl

## Job Allowance

This is the allowance for vehicle movement in and out of the workshop, obtaining tools and materials from store. Job Allowance is calculated as follows:

- 0.3 hrs for a single panel
- 0.5 hrs for any combination of significant panels
- 0.6 hrs for a replacement Bodyshell

Further to the times listed above Thatcham also supply the following task related items:-

## Jig Times

Thatcham allow standard times for loading a vehicle on and off a jig system, these times are not included within any other operation and will need to be entered as an additional item as follows:

- Jig Mount - Universal (Bracketless) System = 2.5 hours.
- Jig Mount - Bracket System = 3.5 hours.

These are standard jig loading times and do not include any time that may be required for pulling, Thatcham do not produce times for pulling because each incident will vary and therefore opinion times are used. Also not included is the removal, where necessary, of additional components for jig mounting access since these components will be specific to a model. Neither does this time include the making good of clamp marks on the sills that may be necessary.

If the vehicle needs to be put on a jig and a bracket system is employed then the cost of hiring brackets to suit the vehicle in question may need to be added when compiling the estimate.

## Paint Materials

This is based on the dimensions of a painted panel in Dm<sup>2</sup> (10cm x 10cm) and is used to calculate the Paint Materials required for a panel, this is only applied to panels which have a paint time. To clarify what the calculations refer to, below is a list of those items included and not included within the Thatcham Paint Material costs...

Paint Material Items	New, Repair and Paint	Blend Into	Items Not Included
Sanding Discs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fibre Grinding Discs
Wet & Dry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Body Filler
Scotch-Brite™	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Production Paper Strips
Masking tape	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cavity Wax
Masking Paper	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Underbody Vinyl
Plastic Car Cover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Underbody Wax
Body Sealer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Plasticiser
Stone Chip	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Plastic Primer
Paper Overalls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Face Mask	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Disposable Gloves	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Panel Wipes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Paint Strainers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Tack Rags	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Degrease Solvent	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Polish Cloth	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Polish	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Cleaning Thinners	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Container - Paper Cup	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Container - Tin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Etch Primer RFU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Primer RFU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Solid Colour - Mix Scheme RFU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Basecoat - Mix Scheme RFU	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Lacquer RFU	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Thatcham Repair Paint Material values are intended to cater for the partial refinishing of the panel in question and are based upon the following material usage:

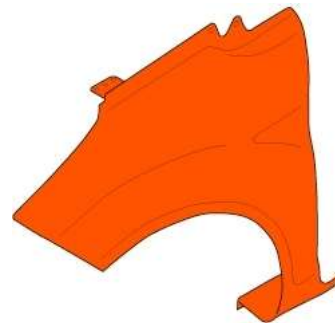
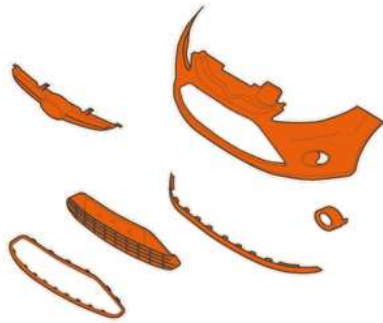
Etch Primer 10%  
 Primer 25%  
 Colour 50%  
 Lacquer 100%

To this end the Dm<sup>2</sup> is reduced for **Repair** or **Paint** to 75% of original Dm<sup>2</sup> and **Blend** Panels reduce to 28% of original Dm<sup>2</sup>.

Where the repair calls for a significantly different material coverage than that stated above, the paint time should be adjusted accordingly by negotiation between the estimator and the assessor.

## Overlap

Using Thatcham's data Vision will only allow time for the removal of components once within an estimate, this is referred to as overlap see the example below:-



### Front Bumper

Bumper Fixing Front	14.8
Bumper Front Fog Lamp Finisher LH	1.8
Bumper Front Fog Lamp Finisher RH	1.8
Bumper Front Lower Grille	7.9
Bumper Front Upper Grille	3.5
DV Focus Front Foglamps	8.0
DV Load-Unload Veh to Ramp	7.0
Lamp Fog Front LH	2.9
Lamp Fog Front RH	2.9
Misc Bumper Front	6.1
Wing Front Liner LH	6.2
Wing Front Liner RH	6.2

### Front Wing LH

← → Bumper Fixing Front	14.8
→ DV Focus Front Foglamps	8.0
→ DV Focus Headlamps	8.0
→ DV Load-Unload Veh to Ramp	7.0
→ DV Side Screen Water Test Front LH	6.2
← Headlamp LH	6.4
← Insulation Wing Front LH	0.8
→ Wing Front Liner LH	6.2
→ Wing Front Liner RH	6.2
← Wing Front Quarter Light LH	9.5

<u>Total in Decimal Minutes</u>	<u>69.1</u>
<u>Total in Decimal Hours</u>	<u>1.2</u>

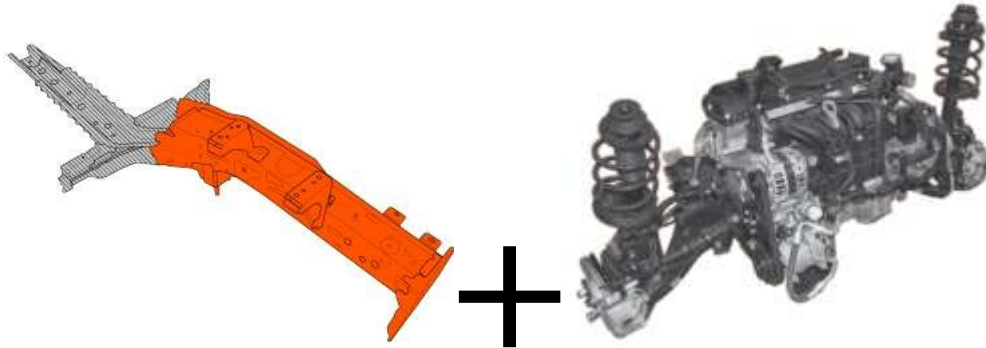
<u>73.1</u>
<u>1.3</u>

The times shown above are in decimal minutes so are then divided by 60 to display the time in decimal hours. However as shown above the Front Wing LH shares some items with the Front Bumper these are therefore removed in overlap making a reduction of 42.2 minutes which is 0.8 hours. This would mean their combined value after overlap would be 1.7

## Advanced features

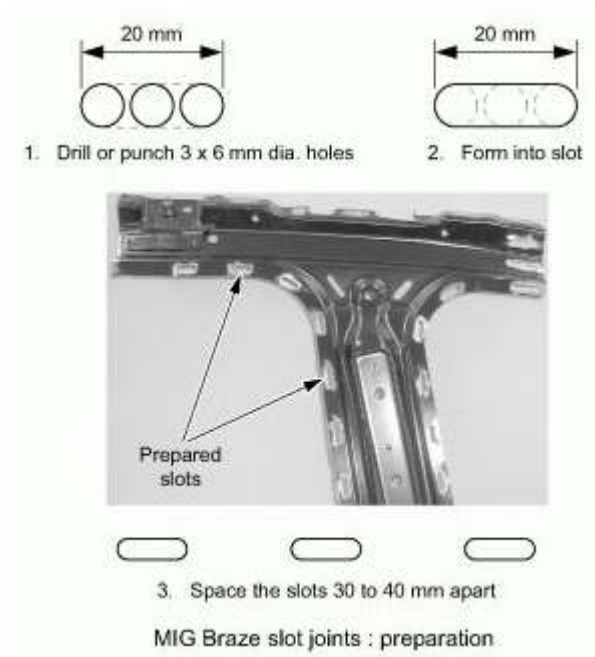
### Take off Panels

This refers to additional task required to carry out the replacement of a panel, this is intended to make it clearer for the user. An example of this is when selecting a Full Chassis Leg Vision will automatically add a line into the estimate for Engine & Suspension R&R.



### Methods Operational Detail

On occasion some panels will require a non-standard method of replacement such as Drill Out UHSS Spot Welds, Cut slot for MIG Braze and Apply Adhesive in this case this information will be displayed in Vision as well as the Estimate printout. The details of this process will be outlined in the Thatcham Methods Manual.



## Repair

Thatcham also supply a Repair paint time for those panels considered repairable, usually non-structural panels. When a panel is changed to Repair from Fit New the Dm<sup>2</sup> will be reduced to 75% of the original Dm<sup>2</sup> to account for the overall reduction of Paint & Materials required for Repair versus Replace. Paint & Materials for repair are based on 10% Etch Primer, 25% Primer, 50% Base Coat and 100% Lacquer. Repaired panels also retain their original Corrosion Protection time. Repair panels do NOT include the time to remove or mask any MET items. Vision does however provide the mechanism that allows the selection of the MET items and will provide the genuine core times from TTS thereby completing this operation.

## Paint (Repair)

This is unique to Vision and refers to Paint Only damage such as scratches. This applies the same logic as Repair, but does not retain the original Corrosion Protection time.

## Blend Panels

Thatcham times include a method to automatically identifying those panels which are adjacent panels and therefore would need blending. This also includes Blend paint time values dependent upon the dimension and location of these panels. When a Blend panel is selected the Dm<sup>2</sup> will be reduced to 28% of the original Dm<sup>2</sup> to account for the overall reduction of Paint & Materials required for Blend versus Replace. Blend panels do NOT include the time to remove or mask any MET items. Vision does however provide the mechanism that allows the selection of the MET items and will provide the genuine core times from TTS thereby completing this operation.

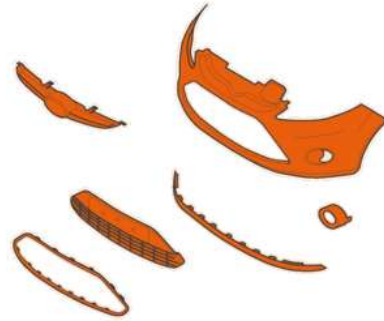
## Methods

Unlike most estimating systems, Vision uses Thatcham's Data and Methods Graphics to present Methods Based Estimating.

## Strip & Refit Method

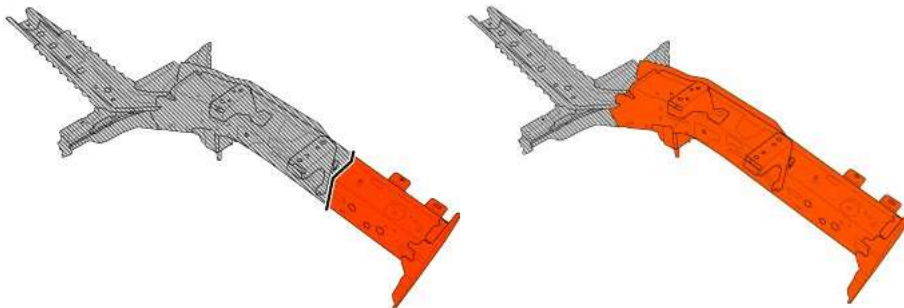
As shown in the overlap section the information shown in the Breakdown in Vision gives the user a virtual method for strip & refit, as it details all tasks and items to be removed to facilitate replacement. Using the Front Bumper as an example you can see this in the example below:-

<b>Front Bumper</b>	
Bumper Fixing Front	14.8
Bumper Front Fog Lamp Finisher LH	1.8
Bumper Front Fog Lamp Finisher RH	1.8
Bumper Front Lower Grille	7.9
Bumper Front Upper Grille	3.5
DV Focus Front Foglamps	8.0
DV Load-Unload Veh to Ramp	7.0
Lamp Fog Front LH	2.9
Lamp Fog Front RH	2.9
Misc Bumper Front	6.1
Wing Front Liner LH	6.2
Wing Front Liner RH	6.2



## Panel Fitment Method

The Graphics in Vision allow the estimator to apply a specific Method of repair as part of the process. Rather than simply buying new parts, the user identifies the preferred Method of repair via the graphics. Using the example below the estimator would select the preferred method to fit the Chassis Leg based on the severity of the damage, In both cases this would mean buying a full Chassis Leg Assembly, but the time would be appropriate to the graphic selected:-



In most other systems the estimator would simply select the full Chassis Leg Assembly and then work out how it might be fitted; the time supplied would give no indication of the method applied.



## Additional Time

Thatcham times are researched on new, undamaged vehicles and the resultant time is for the straightforward Removal and Replacement of items. The Engineer and Repairer must assess the Repairer's working practices, variations in age and condition of the vehicle and other associated work, and adjustments made as necessary.

## Age or Damage Allowance

Older vehicles may require more time to dismantle simply because the vehicle may have suffered from corrosion that will affect the time to remove certain components.

If difficulty is anticipated in removing components due to corrosion or previous damage, additional time should be negotiated.

## Modifications

Where a vehicle has been modified and is not as per the researched model then the modifications will need to be considered when compiling the estimate.

## Geometry Checks

Panels that require the removal of a Suspension Assembly will include a time of 0.6 hour for a basic Geometry Check, but this does not include any time for making geometry adjustments.

## Final Check and Test

Thatcham times do not include the time to carry out Final Checks or Road Test a vehicle following a repair. If these are to be carried out then the time for of these operations will need to be added when the estimate is being compiled.

## Vehicle Cleaning or Valeting

Thatcham times do not include any time for cleaning the vehicle, opinion time for this operation needs to be negotiated if this is required.

## Parts Data

Thatcham also supply TPS (Thatcham's Parts System) this matches up-to-date OEM part numbers and prices for the above items as well as many ancillary parts such as wheel bearings, suspension components etc. These are updated on a Monthly basis.