CHILD RESTRAINT EVALUATION PROGRAM

SERIES 6

EASE-OF-USE ASSESSMENT PROTOCOL

29 September 2017

Contents

Introduction

An Australian consortium of government and motoring organisations has operated a Child Restraint Evaluation Program (CREP) since the early 1990s. Child restraint systems (CRS) have been subjected to dynamic tests (some more severe than the Australian Standard) and propensity for misuse ('Ease of Use') assessments. Consumers are advised of the best performing restraints (via brochures and the internet).

The CREP program includes a propensity for misuse or 'ease of use' evaluation that is based on Canadian and US practices that assesses the safety related propensity for misuse of a restraint. This involves assessing the packaging, instructions and labelling of the CRS, evaluating the adjustment mechanisms for securing a child occupant in the CRS, and installing the CRS in a typical vehicle.

This document describes the CREP protocol for assessing 'Ease of Use' of child restraints.

Method of assessment

This method of assessment requires each parameter listed within five 'parameter categories' to be assessed individually. The *parameter categories* are: Packaging, Instructions, Labels, Child (securing a child in the CRS), and, Vehicle (installing the CRS within a vehicle). Good, Acceptable, Marginal and Poor ratings are recorded for each parameter according to the criteria set out for that parameter (see Table 1 of the Appendix). Results are stored within an electronic database. Digital photographs of each restraint and relevant components are taken.

If restraints cannot be tested and/or assessed to CREP protocols due to a limitation in restraint design (e.g. prescribed dummy does not fit in the restraint, appropriate harness/webbing adjustments cannot be made, etc) or because the restraint appears to be broken or otherwise not suitable for assessment the assessment shall be halted and a member of the CREP consortium notified.

Definitions

The following definitions relate to assessment criteria.

- **CRS –** Child Restraint System

- '**Statement of importance'** – A concise, definite and specific text expression of the significance of something.

- **Separate sections –** a subdivision, generally of an instruction manual, that is distinct from other, unrelated subdivisions. E.g. information related to one mode is distinct from that of another mode.

- **Separate documentation –** a secondary document, or document not physically connected to the primary document. Includes documentation or information accessible via the internet. Does not include instructional videos.

- **QR code** - Quick Response Code. A type of matrix barcode consisting of black squares on a white background readable via a compatible optical scanning system, including a

smartphone with QR reader application.

- **Contrasting text and background –** text and background of differing colours that emphasise the difference between the text and the background.

- **Clear warning** – Easy to understand, unambiguous identification of a potential hazard.

- **Shoulder slot –** a slot through the rigid structure of the CRS which the harness straps pass and which is intended to be at the level of a child's shoulders

- **Harness shoulder height -** The uppermost height of the harness straps intended to be at the level of a child's shoulders.

- **Prescribed age range -** The approximate age range, specified for a mode of a CRS

- **Age appropriate child -** A child (or image of a child) within an age and size range appropriate for the mode.

- **Belt path -** The route through which the seat belt must be passed to secure the CRS to the vehicle, to secure a child occupant within the CRS or, in the case of a booster restraint, both of these.

- **Consistent with instruction manual –** Does not contradict instructions within the instruction manual, including the sequence of steps to perform a task (but not including where non-critical steps are not shown). Diagrams or wording may differ so long as the tasks and steps are not contradictory.

- **Identification marking -** marks upon, or a label affixed to, or directly adjacent to a component, mechanism or part that identify the component mechanism or part.

- **Connect -** to engage such that a secure link is formed between parts, components or mechanisms.

- **Sufficiently tight -**

  For a harness - means that there is less than 25mm of slack as measured by wrapping harness webbing around a cylindrical object 8mm in diameter.

  For a top tether, seat belt, or isofix connector – where it is not possible to pinch a loop of webbing between the thumb and forefinger.

- **Insufficiently tight -**

  For a harness - If the webbing can be wrapped around the object then there is more than 25mm of slack and the harness is insufficiently tight.

  For a top tether, seat belt, or isofix connector – where it is possible to pinch a loop of

webbing between the thumb and forefinger.

- **Shell –** the surface of the rigid structure of the CRS. Generally plastic.

- **Comfort padding** – Soft padding, intended to provide comfort to the occupant. See also cushioning.

- **Cushioning –** Soft padding intended to protect the occupant from the rigid surface of the CRS.

- **Intended to be removed -** A component, part or feature that is designed to be removed or separated from the CRS as part of the use of the CRS. In general tools are not required to separate the component, part or feature from the CRS.

- '**Need to read detailed text' -** Where additional text must be read to understand the instruction, warning, example or other concept.

- **Detailed text –** text that is not stand alone or where multiple sets of stand alone text together are required.

- **Liner –** An intermediary surface between the CRS shell and the child occupying the CRS. Generally fabric.

- **Head rest –** a component, part or mechanism intended to have the child's head against it.

- **Seat back –** The surface that the occupant's back is intended to contact.

- '**Buried within text'** Separated by less than 5mm from any text not relevant to warning or instruction and text not of different font, colour or not bold from surrounding text. □

- '**Closed slot'** - An enclosed narrow, elongated aperture where items can only enter or pass through the slot from either end.

- **'Open slot' -** A narrow, elongated aperture that has a gap or opening along one side. In general such that items do not have to enter the elongated opening only from each end of the opening, but can also enter along the gap along the side. □

- **'Stand alone text'** (e.g. I140) - Separated by at least 5mm from any text not relevant to warning or instruction and text of different font, colour or bold from surrounding text such that the stand alone text is more prominent than surrounding text. □

- **'Key tasks'** (where relevant)

    - Attachment of top tether
    - Tightening of top tether
    - Changing modes (including deploying stabiliser bar, recline or adjusting crotch strap if fitted)
    - Tightening of harness

- Selection of correct harness slot position or harness shoulder height
- Routing seat belt
- Removing slack in seat belt
- Use of any belt positioning feature
- Use of Isofix connectors
- Adjusting crotch strap length

- '**Prominently labelled'** (e.g. C187) – Of contrasting colors to surrounding components and/or labels and not obscured by coverings or other CRS components when viewing the label perpendicular to the surface on which the label is affixed.

- **Buckle coupled in reverse** -That the buckle tongues can be configured in more than one orientation and allow the buckle to couple securely in these configurations.

- **Clearly visible -** Observable by unaided eye by the user when the restraint is installed without the need to move CRS liner or other CRS component

- **Top tether impedes removal of dummy -** Where the top tether strap comes into contact with the child and may become caught around a body part or item of clothing of the child or adult or where the child must be lifted vertically greater than 20cm directly upwards to avoid contact with the top tether strap.

- **Easily accessible -** Located on the surface of the device or directly beneath a fabric cover where actuation is made via pressure on the fabric surface or where access is gained by lifting a flap with no locking parts when the restraint is installed. Furthermore the restraint does not need to be moved to access any part, component or actuation mechanism.

- **Partially disengaged -** One part of the component or mechanism is detached or separated while another part of the same component or mechanism remains attached.

- **Fully disengaged -** totally separated from.

- **Modes of use** – Configurations related to the size of the occupant. As per AS/NZS1754:2013

- **Belt positioning feature -** a component, part or mechanism designed to alter the path of the belt to achieve more secure installation or more secure fit to child. May include belt guides or belt lock offs.

- **Non-removable -** Where a component or part is attached to the restraint or another component in such a way that it is not able to be detached or separated from the CRS during use of the restraint. In general, requires the use of a tool to detach or separate it from the CRS or would require breaking or damaging the CRS to detach or separate it from the CRS.

- **Removable -** A component or part that is attached to the restraint or another component that is intended to be detached or separated from the CRS during use of the restraint. In general, does not require the use of a tool to detach or separate it from the CRS or would

require breaking or damaging the CRS to detach or separate it from the CRS.

- **Permanently deployed –** Fixed in place. Always deployed.

- **Visual Indicator –** an illuminated or coloured device, component or mechanism that is activated and becomes clearly visible when a process with which it is directly associated is activated or successfully completed.

- **Audible Indicator –** a clear audible sound that is generated when a process with which it is directly associated is activated or successfully completed. Does not include the sound of any components engaging, such as a 'click' when a buckle is connected.

- **'At time of purchase' condition** – In 'as new' condition – minor scuffing or scratching acceptable but there should be no signs of 'wear and tear', the CRS should not have been subject to impact or damage and should not be soiled.

Feature weights

Each parameter within each category is assigned a *weighting factor* of 1-5 according to risk of injury, severity of misuse and frequency of misuse seen in the field. As shown in Table 2 of the Appendix, the weight for a parameter depends on the mode of use (rear facing, forward facing or booster). Some parameters do not apply to all modes.

Parameter rating and parameter scores

A numerical scale is used to rate the potential assessment outcomes for each parameter, with 3 points equating to good, 2 points to acceptable, 1 point to marginal and 0 for poor. The parameter rating is then multiplied with the feature weight to provide a *parameter score*.

Where, due to its design, a parameter is not applicable to a CRS a default maximum score (3) is awarded for the parameter (unless otherwise indicated in the parameter).

Category scores and ratings

The scores within each parameter set, or category, are then summed and divided by the theoretical maximum score for the category to obtain a percentage score for the category.

Star ratings (up to a maximum of 5 stars) are awarded for each category and for the overall performance based on a quintile ranking system: 87.5% of maximum and above for 5 stars, 75% and above for 4 stars, 62.5% and above for 3 stars, 50% and above for 2 stars and anything under 50% results in a rating of 1 star.

For presentation purposes, the CREP website (childcarseats.com.au) lists the five category results as a score out of 20 instead of a percentage. This is obtained by dividing the percentage score by 5 and rounding to 2 decimal places. For example, 55% becomes 11.00 out of 20.

Overall rating

An overall percentage is calculated from the average of the category percentages. The overall rating for a mode (forward facing, rear facing, booster) is based on the same quintile breakpoints (87.5%, 75%, 62.5% and 50%).

The breakpoints for star ratings are:

5 stars: 87.5% or more

4 stars: ≥75% but < 87.5%

3 stars: ≥62.5% but < 75%

2 stars: ≥50% but < 62.5%

1 star: Less than 50%

The diagram below illustrates the rating process.

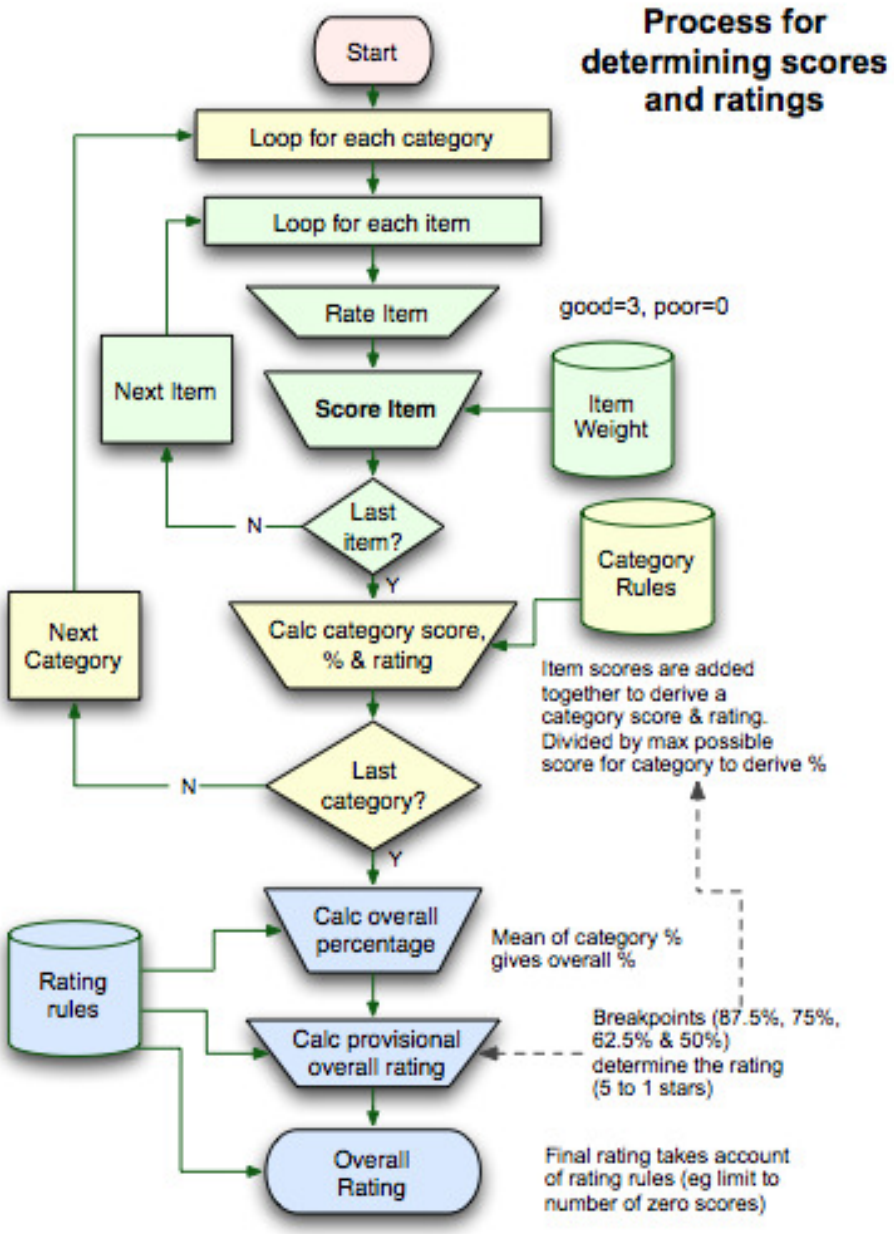

Figure 1. Rating process

Assessment Procedure

Select and obtain a CRS in its 'at time of purchase' condition.

1. Examine the packaging and score the CRS for the appropriate parameters;

2. Score the instruction manual (and any associated videos, if relevant) for the appropriate parameters;

3. Score the labels attached to the CRS for the appropriate parameters;

4. Score the restraint for installation in a vehicle for the appropriate parameters;

    - A Volvo XC60 (first generation) or equivalent will be used as the vehicle for installations for all assessments. Only 2nd row seats shall be used for assessments.

5. Score the restraint for securing a child occupant, changing modes and adjusting the CRS for an occupant for the appropriate parameters;

    - In general a child dummy at the upper limit of the size range that can be accommodated by that mode (using the shoulder height markers) shall be used for assessments, unless specified otherwise in the scoring parameter.

APPENDIX – assessment parameters

The following figure sets out the method of assessment and criteria for scoring. The diagram below illustrates the components of the assessment parameters.

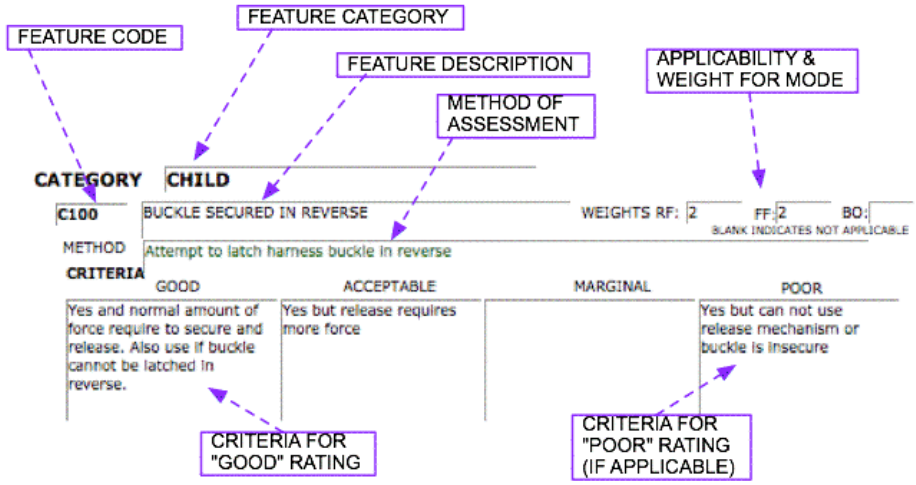

Figure 2. Components of assessment parameter

Table 1.Assessment Parameters

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
	INSTRUCTIONS		**Good**	**Acceptable**	**Marginal**	**Poor**	
I100	**INSTRUCTION MANUAL GENERALLY**	Read through the instruction booklet and assess the integrity of the booklet. Assess whether separate documentation (including secondary or additional booklets, sheets or web based information) is required.	Instruction booklet has separate sections for each mode of use (if more than one mode available) and instruction booklet has table of contents. Includes detailed images of the specific CRS model in illustrations, diagrams and images. No separate documentation required. Instruction booklet is intact.	Instruction booklet is not separated by mode of use (if more than one mode available) or no table of contents. No detailed images of the specific CRS model in illustrations, diagrams and images (i.e. only stylised CRS images or images that lack detail). No separate documentation required. Instruction booklet is intact.	Images of other CRS used (i.e. CRS model that is other than the model being assessed).	Any instructions provided in separate documentation or that must otherwise be accessed by the user that are not also included in the instruction manual or no instruction manual provided.	Changes intended to provide potential for increased discrimination for this assessment parameter and remove content assessed elsewhere. Update to parameter name for clarity. Removes reference to. Instructional videos which are assessed in a separate parameter. Adds assessment of booklet integrity, separate sections for different modes (where relevant) and assesses whether images of the specific CRS are shown.
I105	**INSTRUCTION VIDEOS**	Review any instruction video (e.g. online, DVD or otherwise). Key tasks include the following (where relevant): • Attachment of top tether • Tightening of top tether • Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) • Tightening of harness • Adjusting/changing harness slot position or harness shoulder height • Routing seat belt • Removing slack in seat belt • Use of any belt positioning feature (if relevant) • Use of ISOFix connectors (if relevant) • Adjusting crotch strap length (if adjustable)	Video is specific to the CRS being assessed, covers all key tasks for the mode of use being assessed and user does not need to refer to instruction booklet. The video includes English subtitles or audio to accompany the visual demonstrations. Videos include information/warnings about misuse of the restraint that cover twisted belt/harness, slack in belt/harness/top tether and where the child is too large/small for the CRS. User must be informed of the correct web address via a URL link or QR code using stand alone text or QR code and stand alone text describing the purpose of the link within the first three pages of instruction booklet (the front cover is considered the 1st page)..	Video provided and specific to restraint and covers all key tasks, but does not include English subtitles or audio to accompany the visual demonstrations or does not include warnings about misuse of the restraint that cover twisted belt/harness, slack in belt/harness/top tether or where the child is too large/small for the CRS. User must be informed of the correct web address via a URL link or QR code using stand alone text or QR code and stand alone text describing the purpose of the link within the first three pages of instruction booklet (the front cover is considered the first page)..	Video is not specific to the CRS being assessed or the video or includes content not relevant to the mode being assessed. Reference to online video buried in text or not in first three pages of instruction manual. Video provided on DVD supplied with CRS.	No instruction on video or on provided DVD (where relevant); or no reference to where video can be accessed or method for accessing video does not meet requirements for 'acceptable' or 'marginal'.	Key tasks list revised (expanded). Assessment of provision of warnings, subtitles included.
i110	**QUICK SET UP GUIDE**	Read the instruction manual (or any other source of information provided with the restraint) and identify any quick set up guide. Review quick set up guide, if provided. If a separate quick set up guide is provided for ISOFix (where fitted)	Pictorial quick set up guide to set up, clearly indicating all steps for all key tasks. No detailed text needed.	Pictorial quick set up guide to set up, indicating all steps for all key tasks but reference to detailed text required. Page references provided for detailed text relevant to key tasks.	Pictorial quick set up guide to set up, for all key tasks but not all steps shown, or where detailed text required there is no relevant page reference provided.	No quick set up guide for key tasks or any key task is missing (where relevant)	Key task list updated (expanded). Inclusion of specific consideration of steps required for key tasks and provision of page references. Research supports use of quick set up guide to cover key features.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
		assess for both quick set up guides and score based on the worst performance. The following key tasks are required in the quick set up guide (where relevant). • Attachment of top tether • Tightening of top tether • Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) • Tightening of harness • Adjusting/changing harness slot position or harness shoulder height • Routing seat belt • Removing slack in seat belt • Use of any belt positioning feature (if relevant) • Use of ISOFix connectors (if relevant) • Adjusting crotch strap length (if adjustable)					
I120	**EASY TO READ FONT (TEXT CLARITY)**	Assess the font size and printing quality for all instructions related to key tasks. 1.8mm height is considered adequate font size. Key tasks include: • Attachment of top tether • Tightening of top tether • Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) • Tightening of harness • Adjusting/changing harness slot position or harness shoulder height • Routing seat belt • Removing slack in seat belt • Use of any belt positioning feature (if relevant) • Use of ISOFix connectors (if relevant) • Adjusting crotch strap length (if adjustable)	Contrasting text and background no italics, uses sentence case for all information (running capitals only for warning information), numbers must be numerical figures (not words), red text for warning information (including warning headings). Uses sans serif font of adequate size (1.8mm or greater)	Contrasting text and background, uses sans serif font of adequate size (1.8mm or greater) but uses italics, running capitals, numbers are not expressed as numerical figures or warning text is not red.	Serif fonts used or poor contrast between text and background (including diagrams)	Printing quality poor such that text cannot easily be read, or contrast between text and background (including diagrams) makes text not easy to read or font size inadequate (1.5mm or less)	Research review supports the following format recommendations: Contrasting text and background , use of bold text sparingly for emphasis (not italics), use sentence case for all information (running capitals only for warning information), numbers should be numerical figures (not words), red text for warning information, .
I130	**DIAGRAMS FOR KEY TASKS**	Assess diagrams (including any photographs) in the main section of the manual (i.e. exclude any diagrams within quick reference/set up guides) for key tasks. Key tasks include: • Attachment of top tether • Tightening of top tether • Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) • Tightening of harness • Adjusting/changing harness slot	Diagrams related to key tasks clearly illustrate steps, including numbering of steps or sequential layout of steps to operate components and mechanisms for all key tasks	Diagrams related to key tasks illustrate all key tasks but clarity could be improved. E.g. order of steps not shown numerically or steps not shown sequentially or user needs to read detailed text to understand steps or sequence.	Clarity unacceptable e.g. relevant details in diagrams difficult to make out or not all steps shown	No diagrams for any key task relevant to this mode	Key task list expanded to cover safety critical tasks. Research review support that diagrams related to key tasks should clearly illustrate steps; include numbering of steps or sequential layout of steps to operate components and mechanisms for all key tasks.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
		position or harness shoulder height • Routing seat belt • Removing slack in seat belt • Use of any belt positioning feature (if relevant) • Use of ISOFix connectors (if relevant) • Adjusting crotch strap length (if adjustable)					
I131	**INSTRUCTIONS FOR ACCOMMODATION IN VEHICLE**	Inspect instruction manual for diagrams and instructions about minimum vehicle dimensions required to install the CRS for this mode.	Illustration/s, with maximum dimensions of CRS installed (width, length and depth). Supplementary text provided but not needed.	Illustration of installed CRS but does not show all key dimensions (i.e. one missing from the following: width, length, or depth).	No dimensions but includes advice to measure car or car seat.	No advice to measure car or car seat for this mode.	New parameter. Intended to assess whether user are provided with information that allows them to check whether the restraint will fit in their vehicle.
I135	**TEXT INSTRUCTIONS FOR KEY TASKS**	Assess text/text boxes in the main section of the manual (i.e. exclude any information within quick reference/set up guides) associated with key tasks for this mode. Key tasks include: • Attachment of top tether • Tightening of top tether • Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) • Tightening of harness • Adjusting/changing harness slot position or harness shoulder height • Routing seat belt • Removing slack in seat belt • Use of any belt positioning feature (if relevant) • Use of ISOFix connectors (if relevant) • Adjusting crotch strap length (if adjustable)	Text instructions for all key tasks. Steps numbered and shown sequentially.	Text instructions for all key tasks but steps not numbered or not sequential.	Text instructions related to key tasks fail to include all necessary steps.	Text instructions fail to cover all key tasks.	New parameter to cover gap in previous parameters (text instructions not specifically assessed for current key tasks list)
I140	**AGE/SIZE RANGE CLEARLY SHOWN**	Locate and assess information and diagrams related to child size/age ranges.	Diagrams include an image of a child within prescribed age range, where the approximate age of child can be determined from image/s alone, no need to read detailed text.	Diagrams include an image of a child within prescribed age range, but need to read detailed text or child image is featureless or the approximate age of the child is not able to be determined from the image alone.	Age/size related information in stand alone text only	Age/size related information buried within text.	Removes reference to warnings of importance (now redundant).
I145	**INFORMATION RELATED TO USE OF SHOULDER HEIGHT MARKERS**	Assess information relevant to use of the shoulder height markers. Note whether information is specific to the mode being assessed (where there is more than one mode). 'Diagrams that include CRS' mean that the diagram shows the shoulder height markers on the CRS and includes features specific to the CRS being	Specific reference to shoulder height markers in diagrams that include CRS in correct mode configuration for this mode and Includes image of child in CRS to emphasise maximum/minimum size range. No need to read detailed text. Where there is more than one mode the shoulder height markers relevant	Specific reference to shoulder height markers in diagrams that include CRS but does not include image of child in CRS or need to read detailed text. Where there is more than one mode the shoulder height markers relevant to this mode are differentiated from markers	Where there is more than one mode the shoulder height markers relevant to this mode are not differentiated from markers for other modes in diagrams.	Stand alone text and diagrams of shoulder height markers only (may be accompanied by detailed text).	New parameter to specifically assess information related to shoulder height markers, including diagrams.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
		assessed that surround the shoulder height markers.	to this mode are differentiated from markers for other modes in diagrams.	for other modes in diagrams.			
I150	**MODES OF USE CLEARLY SHOWN**	Where there is more than one mode of use, locate and assess instructions for choosing and adjusting mode of use (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant)	Diagrams of all modes provided, includes instructions for using any component or any task specifically related to this mode no need to read detailed text. Sections related to different modes are colour coded (blue for rearward facing CRS, yellow for forward facing CRS, red for boosters). Select if there is only one mode of use.	Diagrams of all modes provided, .includes instructions for using any component or any task specifically related to this mode, but need to read detailed text. Sections related to different modes are colour coded but not as per the requirements for good.	Diagrams of all modes provided, Fails to include instructions for using any component or any task specifically related to this mode. Sections related to different modes are not colour coded	No diagrams, or not all modes illustrated, or no information about modes	Improved potential discrimination, specific reference to instructions related to mode specific components and colour coding.
I160	**INSTRUCTIONS FOR ROUTING SEAT BELT**	Assess instruction for the method of routing the seat belt for this mode. Correct routing needs to show both sides of restraint, path through slots or around CRS, behind restraint and connection to buckle.	Illustrations showing correct routing of lap and sash part of belt for this mode, illustrations must use colour coding consistent with standards requirements (blue for rearward facing belt path, yellow for forwards facing belt path, red for booster belt path) no need to read text. Clearly shows correct path, in detail, if the seat belt must be routed around any component, through any slot or where the belt must pass on one side of any component.	Illustration showing correct routing seat belt, need to read detailed text or no colour coding or illustrations not colour coded as per requirements for Good.	No illustration or illustration and text are ambiguous or difficult to comprehend or not all steps shown (e.g. illustrations do not clearly show where belt must be routed around any component through any slot or where the belt must pass on one side of any component).	No instructions about routing the adult seat belt for this mode	Expanded to take into account changes to standard since originally developed. Incorporates use of colour coding in related diagrams. Emphasis on routing around components, through slots.
I161	**INSTRUCTIONS RELATED TO IMPORTANCE OF REMOVING SLACK IN BELT OR FLEXIBLE ISOFIX CONNECTORS**	Assess instructions for the method of removing slack in the seat belt and flexible ISOFix connectors (where fitted) and any warnings or statements about the need to remove slack in the seat belt or ISOFix connector. Where flexible ISOFix connectors are fitted assess for both seat belt and ISOFix connectors and score based on the worst performance of either. Where fitted with rigid ISOFix assess for seat belt only. Examples of a clear warning or a statement of importance of removing slack include. 'ENSURE SEAT BELT IS TIGHTENDED PROPERLY' or 'ENSURE ISOFIX CONNECTOR IS TIGHTENDED PROPERLY' or 'WARNING: a loose seat belt is dangerous'.	Illustrations showing correct method to remove slack from belt or flexible ISOFix connector (including all steps) once CRS is installed for this mode and clear warning or statement of importance of removing slack along side diagram and no need to read detailed text	Illustration showing correct method to remove slack from belt or flexible ISOFix connector (including all steps) once CRS is installed for this mode, need to read detailed text and clear warning or statement of importance of removing slack along side diagram	No illustration or illustration and text are ambiguous or difficult to comprehend or no warning or statement of importance or not all steps shown.	No instructions about method to remove slack from belt or flexible ISOFix connector once CRS is installed for this mode	Incorporates assessment of flexible ISOFix connectors so that all CRS attachment methods are covered by one parameter.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
I162	**INSTRUCTIONS RELATED TO IMPORTANCE OF REMOVING TWISTS IN SEAT BELT**	Assess instructions for the method of removing twists in the seat belt during installation and any warnings or statements about the need to remove twists in the seat belt. Examples of a clear warning or a statement of importance of removing twists in the seat belt include. 'ENSURE SEAT BELT IS NOT TWISTED' or 'WARNING: a twisted seat belt is dangerous'.	Illustration showing correct method to remove twists from belt for this mode or illustration showing that twists in the belt is incorrect. Includes clear warning or statement of importance of removing belt twists (and no need to read detailed text	Illustration showing correct method to remove twists from belt for this mode or illustration showing that twists in the belt is incorrect but need to read detailed text. Includes clear warning or statement of importance of removing belt twists.	Illustration and text are ambiguous or difficult to comprehend. Includes clear warning or statement of importance of removing belt twists in stand alone text.	No illustration or illustration and text are ambiguous or difficult to comprehend or warning/statement of importance buried in text or not stand alone text, or no warning of importance/dangers	New parameter. Research shows that twists in seat belt are a key misuse condition.
I165	**INSTRUCTIONS FOR USING ALTERNATIVE ANCHORAGES**	Assess instructions for the method of using any alternative anchorage system (i.e. ISOFix) for the following steps: Preparing the connectors for use Making the connection Checking the connection Tightening the connectors Making any adjustments (if applicable)	Illustrations showing correct use of ISOFIX anchorages for this mode, including all steps involved and numbering of steps or sequential ordering of steps, no need to read detailed text. . Select if no ISOFIX and no ISOFix instructions are provided	Illustration showing correct use of ISOFIX anchorage for this mode including all steps involved but need to read detailed text	No illustration or illustration and text are ambiguous or difficult to comprehend or any steps missing. Select if CRS is not fitted with ISOFix but ISOFix instructions are provided.	No instructions related to using ISOFIX when CRS is fitted with ISOFIX	Wording more specific to remove ambiguity. Specific reference to key stages in using ISOFix connectors.
I170	**INSTRUCTION FOR ATTACHING AND TIGHTENING TOP TETHER**	Assess instructions for attaching top tether for this mode including the following steps: Loosening top tether Attaching top tether to vehicle anchor Attaching top tether to CRS (where relevant) Tightening top tether	Illustrations showing all steps, no need to read detailed text.	Illustrations showing all steps but need to read detailed text on label	Not all steps illustrated, or illustration/text are ambiguous or difficult to comprehend.	No instructions for attaching top tether (where required)	Wording more specific to remove ambiguity. Specific reference to tightening as this was not previously covered for this parameter. Specific reference to key stages in using top tether.
I171	**INSTRUCTIONS RELATED TO IMPORTANCE OF REMOVING TWISTS IN TOP TETHER**	Assess instructions for the method of removing twists in the top tether during installation and any warnings or statements about the need to remove twists in the top tether. Examples of a clear warning or a statement of importance of removing twists in the top tether include. 'ENSURE TOP TETHER IS NOT TWISTED' or 'WARNING: Twists in the top tether webbing may be dangerous'.	Illustration showing correct method to remove twists from top tether for this mode or illustration showing that twists in the top tether is incorrect. Includes clear warning or statement of importance of removing twists in top tether webbing (and no need to read detailed text	Illustration showing correct method to remove twists from top tether for this mode or illustration showing that twists in the top tether is incorrect but need to read detailed text. Includes clear warning or statement of importance of removing twists in top tether webbing.	Illustration and text are ambiguous or difficult to comprehend. Includes clear warning or statement of importance of removing twists in top tether webbing.	No illustration or illustration and text are ambiguous or difficult to comprehend or warning/statement of importance buried in text or not stand alone text, or no warning of importance/dangers	New parameter. Research shows twists in top tether are a key misuse condition. Examples added to method to improve clarity.
I175	**INSTRUCTIONS FOR STOWING EXCESS TOP TETHER STRAP**	Assess instructions for information about stowing excess top tether strap	Illustration showing correct storage location and method to use storage of top tether strap, no need to read detailed text. Select if no top tether.	Illustration showing storage location and method to use storage of excess top tether strap, need to read detailed text	No illustration, or illustration and text are ambiguous or difficult to comprehend	No instructions about stowing excess top tether strap, where required	Now includes consideration of instructions related to the method of storage, not just location
I180	**INSTRUCTIONS FOR USING**	Assess instructions for selecting the correct harness slot height or harness	For Harnessed CRS - Illustration showing correct position depending	Illustration showing correct use depending on size of child, but	Text only instructions	No instructions, where harness slot height is	Expanded to include assessment of seat belt

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
	CORRECT HARNESS SLOTS/HARNESS SHOULDER POSITION (RF/FF) OR CORRECT BELT POSITION (BOOSTERS)	shoulder for this mode for RF or FF CRS. For Boosters assess instructions related to correct positioning of the belt on the child's chest and upper legs.	on size of child (correct location of slot in relation to child shoulders), no need to read detailed text. For Boosters - Illustration showing correct position depending on size of child (correct location of belt in relation to child shoulders and upper legs) no need to read detailed text.	need to read detailed text.		adjustable	position for boosters.
I190	**WARNINGS RELATED TO CORRECT USE OF HARNESS/SEAT BELT**	Assess warnings related to the correct/incorrect use of the harness (for harnessed restraints) or seat belt (for boosters) related to the following issues: Securely connecting the buckle Removing twists Removing slack Examples of a clear warning include. 'ENSURE BUCKLE IS ALWAYS CONNECTED DURING USE' or 'WARNING: a twisted harness is dangerous' or 'WARNING: a loose harness is dangerous'.	Stand alone text and diagrams that cover all required issues (see method) and that are specific to each issue. Select if no harness fitted.	Stand alone text only that covers all required issues (see method) and that are specific to each issue.	Warnings buried in text that cover all required issues (see method).	No warnings about correct harness use for any of the following Securely connecting the buckle Removing twists Removing slack	Research suggested need to focus on specific issues. Reduced subjectivity by referring to specific issues. Examples provided in method to improve clarity.
I210	**INSTRUCTION BOOKLET ACCESSIBILITY AND STORAGE LOCATION**	Determine where on the CRS the instruction booklet is intended to be stored	Provision for storage on the restraint in a clearly visible location or a clearly visible label that prominently shows location of instruction manual. Manual can be removed and replaced when CRS is installed.	Attached to the restraint but not in a clearly visible location. Manual can be removed and replaced when CRS is installed.	Manual can not be removed and replaced when CRS is fully installed.	No provision for storing instruction booklet on CRS	Change to wording to assess storage location when in use, rather than where the manual is located immediately after purchase. I210 and I220 amalgamated into one parameter as the assessment issues are interrelated. Revised to consider how to handle situations where the storage location is assumed but not specified (e.g. a pocket exists but is not labelled or referred to in instructions as the storage location). Revised to improve wording for to assess accessibility of manual when CRS in installed
I230	**INFORMATION RELATED TO MODES OF USE, CHILD SIZE RANGE AND USE OF**	Inspect instruction manual for other languages. CRS brand may be contacted for translation of any non-English content.	Full instructions provided, or available (including instructions on how to access or request copy in relevant language and English) in at least one non-English language	Only information related to modes of use, child size range and use of shoulder height markers in more than one non-English language	Only information related to modes of use, child size range and use of shoulder height markers in only one non-English	Instructions in English only	Changes to requirements following on from consultation – previous requirements were considered onerous. Parameter now focuses on

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
	SHOULDER HEIGHT MARKERS PROVIDED IN OTHER LANGUAGE				language		mode, age and shoulder height marker information
	LABELS		Good	Acceptable	Marginal	Poor	
L100	**LABELS GENERALLY**	Check for labels on the CRS. Assess general clarity	CRS labelled with legible diagrams and text. Label not peeling	Labels /text are legible but somewhat difficult to read (images/diagrams pixelated, contrast is poor, high gloss or reflective labels. Label peeling but secure and <10mm	Labels are legible but very difficult to read (images/diagrams/text blurred or smudged). Label peeling > 10mm	No labels on CRS	Peeling of labels incorporated.
L105	**EASY TO READ FONT (TEXT CLARITY)**	Assess fonts on labels related to key tasks. Font height is the height of lower case characters such as 'e', 'a' or 'o'. Key tasks include: Attachment of top tether Tightening of top tether Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) Tightening of harness tightening Adjusting/changing harness slot position or harness shoulder height Routing seat belt Removing slack in seat belt Use of any belt positioning feature (if relevant) Use of ISOFix connectors (if relevant Adjusting crotch strap length (if adjustable)	Contrasting text and background, no italics, uses sentence case for all information (running capitals only for warning information), numbers must be numerical figures (not words), red text for warning information, green text for information related to correctly completing a task (where red text is used to warn against completing a task incorrectly), sentence length must not exceed 75 characters, no acronyms, terms should be consistent between separate sections, pages or tasks. Uses sans serif font of adequate size (1.8mm or greater)	Contrasting text and background uses sans serif font of adequate size (1.8mm or greater) but does not meet other requirements for good.	Serif fonts used or poor contrast between text and background (including diagrams)	Printing quality poor such that text cannot easily be read, or contrast between text and background (including diagrams) makes text not easy to read or font size inadequate (1.5mm or less)	Updated as per i120 to incorporate research findings, particularly contrasting text/background and use of colours
L110	**LABEL DIAGRAMS FOR KEY TASKS**	Assess diagrams on labels associated with key tasks for this mode. Key tasks include: Attachment of top tether Tightening of top tether Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) Tightening of harness tightening Adjusting/changing harness slot position or harness shoulder height Routing seat belt Removing slack in seat belt Use of any belt positioning feature (if relevant) Use of ISOFix connectors (if relevant) Adjusting crotch strap length (if adjustable)	Diagrams related to key tasks clearly illustrate all steps, including numbering of steps or sequential layout of steps to operate components and mechanisms for all key tasks	Diagrams related to key tasks illustrate all key tasks but clarity could be improved. e.g. order of steps not shown numerically or steps not shown sequentially	Diagrams related to key tasks fail to illustrate all key tasks or clarity unacceptable e.g. relevant details in diagrams difficult to make out or not all steps shown	No diagrams of correct use for this mode	Revised to include assessment of information on the steps to carry out key tasks and an emphasis on showing steps sequentially or numerically. Key tasks list updated (expanded).

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
L115	**SEQUENTIAL NUMBERING OF TEXT INSTRUCTIONS ON LABELS**	Assess text/text boxes associated with key tasks for this mode. Key tasks include: Attachment of top tether Tightening of top tether Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) Tightening of harness tightening Adjusting/changing harness slot position or harness shoulder height Routing seat belt Removing slack in seat belt Use of any belt positioning feature (if relevant) Use of ISOFix connectors (if relevant) Adjusting crotch strap length (if adjustable)	Text instructions related to key tasks clearly describe all steps, including numbering of steps or sequential layout of steps to operate components and mechanisms for all key tasks	Text instructions related to key tasks describe all steps but clarity could be improved. e.g. order of steps not shown numerically or steps not shown sequentially	Text instructions related to key tasks fail to include all necessary steps.	Text instructions fail to cover all key tasks.	New parameter to cover gap in previous parameters (text on labels not specifically assessed for current key tasks list)
L120	**LABELS RELATED TO IDENTIFYING CHILD AGE RANGE**	Assess labels for advice about child sizes for this mode. Prescribed age range means the approximate range of ages that this mode is suitable for.	Diagrams include an image of a child within prescribed age range, approximate age of child can be determined from image alone, no need to read detailed text.	Diagrams include an image of a child but need to read detailed text to determine age range or child image is featureless or the approximate age of the child is not able to be determined from the image alone.	Age/size related information in standalone text only.	Age/size related information buried within text.	Revised to reduce ambiguity and better meet intent of parameter – i.e. that the image of the child is clear and provides guidance as to suitable (approximate) child size range.
L130	**LABELS RELATED TO IDENTIFYING MODES OF USE**	Assess labels for mode of use information, where there is more than one mode of use. An age appropriate child image is one where the image is sufficiently detailed that the approximate age of the child can be determined from the image alone and where the child shown is within the approximate age range for that mode.	Diagrams/illustrations of all modes provided, includes picture of age appropriate child to emphasise appropriate use, includes instructions for using any component or any task specifically related to this mode no need to read detailed text. Diagrams and text related to different modes are colour coded (blue for rearward facing, yellow for forward facing, red for boosters). Select if there is only one mode of use.	Diagrams / illustrations of all modes provided, includes picture of child to emphasise appropriate use but need to read detailed text to determine age range, .includes instructions for using any component or any task specifically related to this mode, no need to read detailed text. Diagrams and text related to different modes are not colour coded. Includes instructions for using any component or any task specifically related to this mode.	Diagrams/illustrations of all modes provided, does not include picture of age appropriate child to emphasise appropriate use or need to read detailed text. Includes instructions for using any component or any task specifically related to this mode.	No diagram/illustration, or not all modes illustrated, and/or text or diagrams/illustrations are ambiguous or difficult to comprehend or fails to include instructions for using any component or any task specifically related to this mode or no information about modes	Incorporated colour coding assessment and specific reference to mode specific components or tasks.
L140	**LABELS RELATED TO ROUTING SEAT BELT**	Assess labels for routing adult seat belt, including all labels relating to the belt path (e.g. those that include instructions on routing the seat belt), not only labels that are along the belt path itself.	Labels include diagram showing correct routing of seat belt for mode, no need to read text and colour coded labels are positioned at any point where the belt must be routed around any component or through any slot or where the belt must pass on one side of any component (e.g. the internal harness system). Colour coded labels must be blue for rearwards facing, yellow for forwards facing or red for boosters.	Diagram showing correct routing of seat belt, but diagram not colour coded or colour coding not as per requirements for Good.	No diagram, or diagram and text are obscured or ambiguous or difficult to comprehend (e.g. illustrations do not clearly show where belt must be routed around any component through any slot or where the belt must pass on one side of any	No instructions for routing adult seat belt	High frequency misuse; updated to include specific reference to routing around components

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
					component).		
L145	**LABELS RELATED TO IMPORTANCE OF REMOVING SLACK IN SEAT BELT OR FLEXIBLE ISOFIX CONNECTORS**	Assess labels for the method removing slack in the seat belt and flexible ISOFix connectors (where fitted) and any warnings or statements about the need to remove slack in the seat belt or ISOFix connector. Where flexible ISOFix connectors are fitted assess for both seat belt and ISOFix connectors and score based on the worst performance of either. Where fitted with rigid ISOFix assess for seat belt only. Examples of a clear warning or a statement of importance of removing twists in the seat belt include. 'ENSURE SEAT BELT IS NOT LOOSE' or 'ENSURE ISOFIX CONNECTOR IS TIGHTENDED PROPERLY' or 'WARNING: a loose seat belt is dangerous'.	Illustrations showing correct method to remove slack from belt or flexible ISOFix connector (including all steps) once CRS is installed for this mode and clear warning or statement of importance of removing belt slack along side diagram and no need to read detailed text	Illustration showing correct method to remove slack from belt or flexible ISOFix connector (including all steps) once CRS is installed for this mode, and clear warning or statement of importance of removing slack along side diagram but need to read detailed text	No illustration or illustration and text are ambiguous or difficult to comprehend or no warning or statement of importance alongside diagrams or not all steps shown.	No instructions about method to remove slack from belt or flexible ISOFix connector once CRS is installed for this mode	High frequency misuse. Added requirement for good that all steps must be shown… Intent is to encourage warnings about dangers of loose belt slack on labels but this is often missing, so many CRS had previously scored acceptable
L146	**LABELS RELATED TO IMPORTANCE OF REMOVING TWISTS IN BELT**	Assess labels for the method of removing twists in the seat belt during installation and any about the need to remove/avoid twists in the seat belt. Examples of a clear warning related to twists in the seat belt include: 'ENSURE SEAT BELT IS NOT TWISTED' or 'WARNING: a twisted seat belt is dangerous'.	Illustration includes pictorial and text warning to remove or avoid twists in the seat belt.	Illustration warning to remove or avoid twists in seat belt.	Text only warning specifically addressing removing or avoiding twists in seat belt.	No specific warnings about twists in seat belt.	New parameter. Research shows this is a key misuse condition.
L150	**LABELS RELATED TO ATTACHING AND TIGHTENING TOP TETHER**	Assess labels for information about top tether	Illustration showing attachment of tether to vehicle, attachment of tether to CRS (if removable tether) and tightening of tether no need to read detailed text. Select if no top tether.	Illustration showing attachment of tether to vehicle, attachment of tether to CRS (if removable tether) and tightening of tether use of tether, need to read detailed text on label	No illustration of either attachment of tether to vehicle, attachment of tether to CRS (if removable tether) or tightening of tether, or illustration and text are ambiguous or difficult to comprehend.	No instructions about top tether	Moderate frequency misuse, not covered by standard
L155	**LABELS RELATED TO STOWING EXCESS TOP TETHER STRAP**	Assess labels for information about stowing excess top tether strap	Illustration showing correct storage of top tether strap, no need to read detailed text	Illustration showing storage of excess top tether strap, need to read detailed text on label	No illustration, or illustration and text are ambiguous or difficult to comprehend	No instructions about stowing excess top tether strap, where fitted	Reference to boosters without top tether removed.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
L159	**LABELS RELATED TO CHANGING HARNESS SLOT POSITION/HARNESS SHOULDER HEIGHT**	Assess labels for changing the harness shoulder height/ changing harness slot position for this mode	Illustrations show all steps in changing harness shoulder height/harness slot position. No need to read detailed text.	Illustrations show all steps in changing harness shoulder height/harness slot position. Need to read detailed text.	Illustrations provided but do not show all steps in changing harness shoulder height/harness slot position.	Text only instructions or no instructions.	New parameter to specifically cover steps in changing harness position. Separated out from L160 for clarity and to allow separate assessment of distinct issues.
L160	**LABELS RELATED TO USING CORRECT HARNESS SLOT/HARNESS SHOULDER HEIGHT**	Assess labels for selecting the correct harness shoulder height/harness slot for this mode.	Illustration showing correct harness shoulder height/harness slot selection depending on size of child, no need to read text and shows diagram/illustration of incorrect harness shoulder height/harness slot selection Select if no harness fitted.	Illustration showing correct slot selection depending on size of child, no need to read detailed text. No diagram/illustration of incorrect harness shoulder height/harness slot position.	Illustration showing correct harness shoulder height/harness slot selection depending on size of child, but need to read detailed text.	No instructions, or text only (where harness shoulder height/harness slot height is adjustable).	Simplified and clarified to specifically address selecting the correct harness position. Updated wording to better address CRS with harness height adjustment built into headrest. Also includes provision for examples of incorrect height/slot selection.
L161	**LABELS RELATED TO USING BELT GUIDE OR BELT POSITIONING FEATURE**	Assess labels for instructions related to using any belt positioning feature, belt guide, belt routing feature or mechanism associated with routing the seat belt (if fitted)	Illustration showing correct use of belt guide and/or sash guide (if fitted) including all steps, depending on size of child, no need to read detailed text. Select if no guide fitted.	Illustrations provided but need to read detailed text on label. All steps covered.	Text only instructions that cover all steps	No instructions or not all steps covered.	Changed to only apply to belt positioning features (harness slot use now covered in L159 and L160). Belt positioning features present on harnessed CRS so this needs to be distinct from harness assessment.
L165	**LABELS RELATED TO USING ALTERNATIVE ANCHORAGES**	Assess labels for the method of using any alternative anchorage system (i.e. ISOFix). Assess for the following steps: Preparing the connectors for use Making the connection Checking the connection Tightening the connectors Making any adjustments	Illustrations showing correct use of ISOFIX anchorages for this mode, including all steps involved no need to read detailed text. Select if no ISOFIX fitted.	Illustration showing correct use of ISOFIX anchorage for this mode including all steps involved but need to read detailed text	No illustration or illustration and text are ambiguous or difficult to comprehend or any steps missing	No labels related to using ISOFIX when CRS is fitted with ISOFIX	New parameter. Assesses labels that instruct the user how to use ISOFix anchorages.
L170	**WARNINGS RELATED TO MISUSE OF THE HARNESS OR SEAT BELT**	The focus of this item is warnings related to securely restraining the child occupant. Assess labels for warnings about harness use or seat belt (for boosters only) related to the following issues: Securely connecting the buckle Removing twists Removing slack Examples of a clear warning include. 'ENSURE BUCKLE IS ALWAYS CONNECTED' or 'WARNING: a twisted harness is dangerous' or 'WARNING: a loose harness is dangerous'	Illustrations and stand alone text warnings for all required issues (see method) and that are specific to each issue.	Stand alone text warnings for all required issues (see method) and that are specific to each issue. but no illustration for all required issues	Warnings buried in text or not all required issues included in stand alone text warnings (see method for required issues)	No warnings provided for all required issues (see method)	Reference to standards table removed (redundant). Specific issues listed and examples provided.
L180	**LABELS CONSISTENT**	Assess labels for consistency of key tasks with instruction booklet. Key tasks	Diagrams and text on labels are consistent with instruction manual			Specific difference in instructions, steps or	Previously requirement was that labels must match

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
	WITH INSTRUCTIONS	include: Attachment of top tether Tightening top tether Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) Tightening of harness Adjusting/changing harness slot position or harness shoulder height Routing seat belt Removing slack in seat belt Use of any belt positioning feature (if relevant) Use of ISOFix connectors (if relevant) Adjusting crotch strap length (if adjustable)				tasks between labels and instruction manual	instructions, but this implies they must be identical. Wording changed to allow for differences (e.g. changes in colour, more concise labels and text on diagrams on labels) so long as the instructions are not inconsistent. Wording changed to better match intent - that safety related differences are the focus, not changes in equivalent diagrams, or text (including having more concise text on labels).
L195	**LABELS RELATED TO CORRECT USE OF HARNESS**	Assess labels showing how to correctly fit the harness for the following: Connecting the buckle How to tighten harness How to loosen harness	Clear instructions, including images specifically addressing: Connecting the buckle How to tighten harness How to loosen harness Select if no harness fitted.	Clear instructions, specifically addressing: Connecting the buckle How to tighten harness How to loosen harness But no diagram for any one of the above	Instructions specifically addressing connecting buckle and tightening/loosening harness but no diagrams or diagrams/instructions are ambiguous or unclear.	Labels do not specifically address any of the following: Connecting the buckle How to tighten harness How to loosen harness	Research notes importance of including information on removing twists and slack. Specific tasks required are now listed for clarity. Requirement for warnings removed (assessed elsewhere).
L210	**VISIBILITY OF LABELS**	Assess the visibility of labels associated with each key task for this mode. Note whether a cover or other component needs to be moved in order to view the whole label. Key tasks include: Attachment of top tether Tightening of top tether Changing modes (inc deploying stabiliser bar, recline or adjusting crotch strap if relevant) Tightening of harness Adjusting/changing harness slot position or harness shoulder height Routing seat belt Removing slack in seat belt Use of any belt positioning feature (if relevant) Use of ISOFix connectors (if relevant) Adjusting crotch strap length (if adjustable)	All labels related to key tasks can be seen when carrying out task to which they pertain. Warnings related to key tasks visible when CRS installed.	Some labels related to key tasks are partially obscured or are not within the user's line of sight when carrying out the task to which they pertain. Warnings related to key tasks visible when CRS installed.	Some labels related to key tasks are fully obscured when carrying out the task to which they pertain. Warnings related to key tasks partially obscured or partially covered when CRS installed.	All labels related to key tasks are fully obscured or covered when carrying out key tasks. Warnings related to key tasks fully obscured or covered when CRS installed.	Removes assessment of which side labels are on and focuses on the label being visible when carrying out a related task. More emphasis on warnings being visible when CRS installed. Distance requirements removed as this did not achieve intended effect and could penalise restraints unintentionally. Specifically for labels related to key tasks.
L220	**IDENTIFICATION OF STABILISER BAR**	Assess labeling of stabiliser bar	Stabiliser bar clearly marked using contrasting colours where the colour of the stabiliser bar identification marking contrasts with any background colour. Identification of stabiliser bar is consistent with both	Stabiliser bar marked, but identification marking does not use contrasting colours.	Stabiliser bar marked, but identification marking is unclear or obscured. Identification of stabiliser bar is not	No identification marking of stabiliser bar	More specific requirements developed. Requirements made clearer. Increased scoring options.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
			instruction manual and labels (i.e. same terms are used). Select if no stabiliser bar or stabiliser bar permanently deployed.		consistent with both instruction manual and labels (i.e. different terms are used).		
	PACKAGING		Good	Acceptable	Marginal	Poor	
P100	**EASY TO READ FONT (TEXT CLARITY)**	Inspect text for mode information, child size/age range, warnings, shoulder height marker information and information related to the installed dimensions of the CRS.	Contrasting text and background. No italics, use sentence case for all information (running capitals only for warning information), numbers must be numerical figures (not words), red text for warning information, sentence length must not exceed 75 characters, no acronyms, terms should be consistent between separate sections. Uses sans serif font of adequate size (7mm or greater)	Contrasting text and background uses sans serif font of adequate size (5mm or greater) but does not meet other requirements for good.	Serif fonts used or poor contrast between text and background (including diagrams)	Printing quality poor such that text cannot easily be read, or contrast between text and background (including diagrams) makes text not easy to read or font size inadequate (4mm or less)	Updated as per i120 and L105 to incorporate research findings, particularly contrasting text/background and use of colours.
P110	**CHILD AGE/SIZE RANGE CLEARLY SHOWN**	Inspect all of packaging. Locate size/age range information and assess. Examples of 'same section' include on the same page for booklets , on the same side for swing tags or on the same panel for boxes	All information displayed in same section consistently illustrating appropriate age ranges for each mode of use. Specific reference to shoulder height markers in diagrams.	Information including text and illustrations are displayed somewhere on packaging (but not in same section). No specific reference to shoulder height markers in diagrams.	Information buried within instructions and/or no appropriate illustrations	No information about correct age range	Includes explanation of 'same section' requirement.
P120	**MODES OF USE CLEARLY SHOWN**	Inspect packaging for information about modes of use	Illustrations of all modes provided, includes image of age appropriate child and the approximate age of the child can be determined from the image alone. No need to read any text.	Illustrations of all modes provided, does not include image of child or the approximate age can not be determined from the image alone or the child image is featureless, or there is a need to read text instructions	No illustration, or not all modes illustrated, or illustration and text are ambiguous or difficult to comprehend	No information about all modes of use	No change.
P130	**ACCOMODATION IN VEHICLE**	Inspect packaging for diagrams and instructions about minimum vehicle dimensions required to install the CRS for this mode.	Illustration/s, with maximum dimensions of CRS installed (width, length and depth). Supplementary text provided but not needed.	Illustration of installed CRS but does not show all key dimensions (i.e. one missing from the following: width length, or depth).	No dimensions but includes advice to measure car or car seat.	No advice to measure car or car seat for this mode	Addition of length as an assessable item added to parameter.
P140	**INFORMATION RELATED TO MODES OF USE, CHILD SIZE RANGE AND USE OF SHOULDER HEIGHT MARKERS IN OTHER LANGUAGE**	Inspect packaging for information provided in foreign languages. CRS brand may be contacted for translation of any non-English content.	Information related to modes of use, child size range and use of shoulder height markers in at least one non-English language	Only information related to modes of use OR child size range OR use of shoulder height markers in at least one non-English language	Instructions in English only		Evidence suggests the importance of providing languages on packaging other than English, especially for selecting appropriate restraints. Revised to remove onerous requirement to provide information in multiple specified languages. Parameter now focuses on mode, age and shoulder height marker information.
	CHILD		Good	Acceptable	Marginal	Poor	
C100	**BUCKLE CAN NOT BE**	Attempt to connect harness buckle in reverse	Buckle cannot be connected in reverse			Buckle can be connected in reverse	No change.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
	CONNECTED IN REVERSE						
C110	**INDICATORS OF CORRECT CONNECTION OF HARNESS BUCKLE**	In an environment with no substantial background noise, connect harness buckle and check for audible click or other audible indication that buckle is engaged. Check for visual indication, external to the buckle tongues, signaling that buckle is engaged. Where an audible and/or visual indicator is present and engages check that the buckle is correctly connected and secure.	Audible and visual indicator, aside of 'click' or noise from buckle mechanically engaging that buckle is correctly connected	Audible or visual indicator aside of 'click' or noise from buckle mechanically engaging of correctly connected buckle	A 'click' or noise from buckle mechanically engaging only to indicate correct connection.	Neither audible nor visual indicators of correctly connected buckle or indicator is faulty or malfunctioning.	Additional of marginal field, where a mechanical click no longer scores acceptable. Better encouragement of audible and/or visual indicators. Includes check in method to ensure indicator is functioning correctly (where fitted).
C120	**HARNESS ADJUSTMENT ACTUATOR ACCESSIBILITY**	With CRS installed for this mode locate harness adjustment control and determine accessibility. Easily accessible includes mechanisms under flaps, or directly accessible when the restraint is installed that require a single action by the user to access. Examples of controls that are not easily accessible include those that: are deeply recessed and therefore difficult to actuate, that require moving CRS components, where the seat belt blocks the users access to the actuator, or that require movement of the restraint from the final installed position.	Actuator is: Visible; neither obscured nor encumbered in any way by another part of the CRS or the adult seat belt and is easily reached and easily activated without interference or obstructions from CRS components. No other component in close proximity that could be mistaken for the harness adjustment actuator for either tightening or loosening.	Actuator is: partially obscured by another part of the CRS or the adult seat belt; not encumbered in any way by, another part of the CRS or the adult seat belt and is easily reached and easily activated without interference or obstructions from CRS components. No other component in close proximity that could be mistaken for the harness adjustment actuator for either tightening or loosening.	Actuator is obscured by another part of the CRS or the seat belt securing the CRS or there is another component in close proximity that could be mistaken for the harness adjustment actuator for either tightening or loosening; is not encumbered by another part of the CRS or the seat belt and is easily reached and easily activated without interference or obstruction from CRS components.	Activator is: Encumbered in any way by another part of the CRS or the seat belt securing the CRS, or cannot be easily reached or activated	Added reference to potential interaction or interference from other components. Update to method to provide examples of 'not easily accessible'.
C130	**HARNESS ADJUSTMENT EASY TO TIGHTEN OR LOOSEN**	Remove any comfort padding and install the restraint with the largest size child dummy that the CRS can accommodate. For this assessment a tensile force measuring device capable of reading in 5N increments (minimum) and capable of reading a minimum of 40N should be used. 1) Loosening. Affix the force measuring device to the harness webbing near to the harness slot (as close as is practical). Actuate any harness release mechanism and pull the force measuring device away from the restraint until the harness has 100mm of slack (as	Automatic adjustment to tighten harness (e.g. retractor) and less than 50N to loosen 100mm.	Less than 70N to make harness sufficiently tight or to loosen 100mm.	More than 70N but less than 90N to make harness sufficiently tight or to loosen 100mm	More than 90N to tighten or loosen or can not be made sufficiently tight. Or retractor (or other automatic mechanism) fails to remove sufficient slack from harness and harness is not sufficiently tight).	Force requirements updated to provide improved differentiation. Explanation of condition where harness is considered 'sufficiently tight' added to remove ambiguity. Other updates to method to improve clarity. Improved assessment method for automatic adjustment systems.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
		measured by amount of webbing passing through shoulder slots or a load of more than 90N is reached.. Record the maximum force measured. 2) Tightening. Attach the force measuring device to the free end of harness strap (i.e. the loose end of the strap exiting the adjustment mechanism). Pull the tensile measuring device away from the CRS until the harness is sufficiently tight or a load of more than 90N is reached. Record the maximum force measured. If the CRS is fitted with an automatic adjustment system (e.g. retractor mechanism) then upon actuation the automatic adjustment system must remove all excess harness slack and the harness must be sufficiently tight. For this parameter 'sufficiently tight' means that, as measured at the chest level of the child dummy, the assessor cannot pinch a loop of webbing between their thumb and forefinger. If a loop of webbing can be pinched then the harness is insufficiently tight.					
C140	**INDICATORS OF CORRECT HARNESS ADJUSTMENT**	When harness is tightened check for audible or visual indication of correct tightening (i.e. that the harness is sufficiently tight). Where an audible and/or visual indicator is present and engages check that the harness is sufficiently tight for the loosest harness setting for which the indicator engages. For this parameter 'sufficiently tight' means that, as measured at the chest level of the child dummy, the assessor can not pinch a loop of webbing between their thumb and forefinger. If a loop of webbing can be pinched then the harness is insufficiently tight.	Audible or visual indicator of correct harness tightening		No indicators of correct harness tightening,	Faulty or malfunctioning indicator or indicator incorrectly indicates correct tensioning	Inclusion of check and assessment for faulty indicator.
C160	**VISIBILITY AND ALIGNMENT OF SLOTS IN SHELL AND LINER**	Remove any comfort padding. Inspect slots in liner and shell from front of CRS. Alignment may be established visually or by touch. Liner slot is any slot in a fabric liner or any slot in a head rest.	Shell slots aligned with liner slots and shell slots are clearly visible from front of restraint	Shell slots aligned with liner slots but shell slots are not clearly visible from front of restraint	Liner slots not aligned with shell slots or slots/liner adjustable such that in some positions liner slots		Specific exclusion of comfort padding/cushioning. Improved wording for clarity.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
		Does not include slots in comfort padding or cushioning intended to be removed while a child occupies the CRS.			and shell slots will not align		
C170	**METHOD OF CHANGING HEIGHT OF SHOULDER STRAPS**	Change harness shoulder height/ harness slot position	No need to disengage/unthread harness components to change harness shoulder height position.		Harness needs to be partially disassembled but does not need to be routed around/over/under components in a specific configuration (e.g. over/under a bar)	Harness needs to be partially disassembled and needs to be routed around/over/under components in a specific configuration (e.g. over/under a bar) or where components obstruct the path of the harness straps	Evidence from current research that harness adjustment results in less errors when one integrated system not requiring threading. Change in fields to better encourage systems that do not need disassembly.
C171	**PHYSICAL ACTIONS TO CHANGE POSITION OF SHOULDER STRAPS**	Determine how many physical actions by the user are required to change the height/position of the shoulder straps. Where both hands are required simultaneously to perform a task this is counted as two actions.	2 or less actions or not adjustable.	3 actions.	4 actions	More than 4 actions	New parameter to assess
C175	**CROTCH STRAP ADJUSTMENT**	Refer to instructions and determine if the crotch strap is adjustable, for which modes it is adjustable and how to adjust.	Crotch strap adjustable but no CRS component or cover needs to be moved to access method of adjustment and no partial or full disassembly is required. Select if no crotch strap or crotch strap not adjustable.	Crotch strap is adjustable but CRS component or cover needs to be moved to access method of adjustment. No partial or full disassembly is required.	Crotch strap is adjustable but partial disassembly is required however all components are still permanently connected to CRS	Partial or full disassembly required, components not permanently connected to CRS and could become detached and lost.	New assessment parameter aimed to assess ease of changing the crotch strap for children of different sizes.
C185	**LINER/HARNESS INTERACTION**	Where fitted, check how the adjustment of any adjustable rigid liner/headrest affects the correct harness slot	Where the harness passes through slots or openings in a liner or headrest, the position of any rigid liner/headrest component cannot be altered independently of harness slots in the CRS shell. Does not apply to non-rigid components such as comfort padding. Select if no adjustable liner/headrest fitted.			Raising or lowering any rigid liner/headrest component appears to result in correct harness positioning but is contrary to manufacturer's instructions (incorrect harness shoulder height could be used)	As for C160 revised to apply specifically to rigid components but not to comfort padding/cushioning.
C187	**HARNESS ROUTING CONSISTENT BETWEEN MODES**	For convertible restraints check whether the harness routing is different between modes. (Note: this does not refer to the need to use different harness slots in different modes. Rather different routing around components is the focus for this assessment item).	Harness routing is the same for all modes		Harness routing is different between modes (e.g. routing is different around a component between modes) but is prominently labelled with diagrams that clearly identify correct routing.	Harness routing is different between modes and not prominently labelled or diagrams are unclear (detailed text required or diagram not sufficiently detailed)	Wording revised to provide increased clarity and to better address instances where the harness must be routed differently between modes.
C190	**REMOVAL OF COVER**	Remove entire fabric cover in accordance with instructions	Entire cover can be removed and replaced without unthreading straps or other disassembly			Harness needs to be partially unthreaded to fully remove cover or there is a need to disassemble	No change.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
						components	
C200	**REMOVAL OF CHILD WHEN TOP TETHER ATTACHED**	Attempt to remove dummy with top tether in place (loosen top tether if necessary). If top tether impedes removal of dummy partially disengage top tether (from CRS only, if possible) and re-attempt removal. If tether still impedes removal of dummy fully disengage top tether (i.e. from vehicle anchor point).	Dummy can be removed from restraint without the need to disengage tether (Top tether may be loosened).	Tether needs to be partially disengaged or separated to remove dummy but is still connected to vehicle anchor	Tether needs to be completely disengaged from vehicle anchor to remove dummy		Wording revised to clarify where the tether is considered 'disengaged'
C210	**INDICATORS OF EITHER OF CHILD'S ARMS BEING FREE FROM HARNESS**	Fit an appropriately sized dummy in the restraint according to the manufacturers instructions and remove one, then the other dummy arms out of the harness or for booster seats place the sash strap behind the shoulder and then under the arm Where an audible and/or visual indicator is present and engages check that the indicator is functioning correctly by removing the child's arm several times and noting when the indictor engages.	Correctly functioning audible and visual indicators alerting carer if either arm is freed from harness shoulder strap or arm is removed from seat belt sash strap	Correctly functioning audible or visual indicator if either arm is freed from harness shoulder strap or arm is removed from seat belt sash strap	No indicators alerting carer if either arm is removed from harness shoulder strap or arm is removed from seat belt sash strap.	Incorrectly functioning or faulty indicator	Includes check in method to ensure indicator is functioning correctly (where fitted
C230	**INDICATORS OF CORRECT POSITIONING OF LAP-SASH BELT ON BOOSTER SEATS**	Secure child with adult seat belt and check for indicators Where an audible and/or visual indicator is present and engages check that the indicator correctly identifies correct and incorrect belt positioning by changing the belt positing and noting when the indicator engages.	Correctly functioning audible and visual indicators (apart from coloured belt path labels) of correctly positioned seat belt sash strap	Correctly functioning audible or visual indicator (apart from coloured belt path labels) of correctly positioned seat belt sash strap	No indicator, apart from coloured belt path labels, of correctly positioned seat belt sash strap	Incorrectly functioning or faulty indicator	Wording revised for better clarity and assessment of incorrectly functioning indicator added
C250	**EASE OF SEAT BACK HEIGHT ADJUSTMENT**	Where seat back height adjustment is available, adjust the height to each stop within the adjustment range	Seat back height adjustment actuator easily accessible and can be actuated when child occupies CRS. Mechanism does not bind. Actuator not behind child for any size of child when CRS is occupied. Select if seat back height not adjustable.	Seat back height adjustment actuator not easily accessible or actuator behind child for any size of child when CRS is occupied but seat back adjustment can be made while CRS is installed (when not occupied) without need to adjust top tether or seat belt.		Seat back height adjustment cannot be made when CRS is installed or when adjusted seat belt and/or top tether must be adjusted and/or height adjusting mechanism binds	No change.
	VEHICLE INSTALLATION		Good	Acceptable	Marginal	Poor	
V100	**INDICATORS OF CORRECT SEAT BELT ROUTING OR CORRECTLY CONNECTED ISOFIX CONNECTORS**	Install CRS in vehicle in using seat belt and ISOFix connection (where fitted). Where ISOFix connectors are fitted assess for both seat belt and ISOFix indicators and score based on the worst performance of either. When CRS is installed observe whether there is any indictor identifying that the seat belt or	Correctly functioning audible and visual indicators (apart from coloured belt path labels or the noise of mechanical components engaging e. g. a 'click') of correctly or incorrectly routed adult seat belt or of correctly or incorrectly attached ISOFix connectors (where fitted).	Correctly functioning audible or visual indicator (apart from coloured belt path labels or the noise of mechanical components engaging e. g. a 'click') for correctly or incorrectly routed seat belt or of correctly or incorrectly attached ISOFix	No indicators, (apart from coloured belt path labels, for correctly routed seat belt or the noise of mechanical components engaging e. g. a 'click') for	Incorrectly functioning or faulty indicator	Assessment of ISOFix connectors incorporated so that vehicle attachment to CRS is assessed in one parameter for all attachment options. Option for incorrectly functioning indicator introduced.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
		ISOFix connector (where fitted) is correctly/incorrectly routed/attached. Where an audible and/or visual indicator is present and engages check that the seat belt and/or ISOFix connectors are correctly routed and connected. Applies to both flexible and rigid ISOFix (where fitted).		connectors (where fitted)	correctly or incorrectly routed seat belt or of correctly or incorrectly attached ISOFix connectors (where fitted)		Where indicator is fitted a check that it is functioning correctly is included.
V120	**EASE OF ACHIEVING CORRECT BELT ROUTING OR CORRECT ISOFIX CONNECTION**	Install CRS in vehicle and assess for ease of routing seat belt or, where fitted ISOFix (applies to both rigid or flexible ISOFix). Where ISOFix connectors are fitted assess for both seat belt and ISOFix connectors and score based on the worst performance of either.	Seat belt or flexible ISOFix connector does not need to be routed through any closed opening, such as a slot. For seat belt or ISOFix no fabric, cushioning or components need to be moved to achieve routing or connection. CRS does not impede or obstruct and CRS does not need to be moved to make the connection. For rigid ISOFix both connectors connect in the same action (i.e. at once)	Fabric, cushioning or components must be moved to route belt or ISOFix or to make the connection. Seat belt or flexible ISOFix connector does not need to be routed through a slot. For seat belt or ISOFix CRS does not impede or obstruct and CRS does not need to be moved to make the connection. For rigid ISOFix separate actions are required to connect to both anchors.	Seat belt or flexible ISOFix connector must be routed through a slot which can not be opened. For seat belt or ISOFix CRS impedes or obstructs making the connection or CRS needs to be moved to make the connection.	Protrusions, narrowing or components interfere with routing of belt or ISOFix or connection cannot be made.	Method updated to incorporate potential need to move components or padding to route seat belt. ISOFix systems incorporated.
V121	**INSUFFICIENT SEAT BELT OR ISOFIX CONNECTOR LENGTH TO INSTALL CRS**	Assess for seat belt and ISOFix (where fitted). Where ISOFix connectors are fitted assess for both seat belt and ISOFix connectors and score based on the worst performance of either. Attempt to install CRS using seat belt or ISOFix (where fitted) and check whether there is insufficient seat belt length or ISOFix connector length to install.	Sufficient seat belt length or ISOFix connector length to install.			Insufficient seat belt length or ISOFix connector length to install. .	New parameter aimed to assess where a CRS can be fitted into a limited number of vehicles based on ISOFix connectors or seat belt length.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
V125	**PROPENSITY TO MISROUTE SEAT BELT AROUND HARNESS WEBBING**	Set the harness height position to the lowest position possible for this mode. Loosen the harness to the fullest extent possible. Examine the belt route and determine whether the belt can be routed on the incorrect side of any harness webbing, including webbing that connects to the harness system. Where the belt can be routed on the incorrect side of the harness connect the seat belt to the buckle for that routing and install a child dummy then tighten the harness. If interaction between the seat belt and harness interferes with tightening the harness note this. Determine whether the seat belt contacts the harness in any harness height position for this mode (if uncertain change harness height and check whether contact occurs). Examine whether if the seat belt sash portion is tightened will the seat belt load the harness webbing or any webbing connected to the harness system. Note whether any loading may occur. Repeat for alternative configurations that could lead to contact between the harness and seat belt or loading on the harness by the seat belt.	No interaction between harness and seat belt for any configuration. Select if harness and seat belt are physically separated so that no interaction can occur.	Contact between harness and seat belt possible but movement of the seat belt does not load harness and there is no rubbing between seat belt and harness webbing. Interaction between seat belt and harness does not interfere with harness tightening.	Contact between harness and seat belt but there is rubbing between seat belt and harness webbing. Movement of the seat belt does not load harness and there is no interaction that interferes with tightening of the harness.	Contact between harness and seat belt and loading on the belt causes loading on the harness or there is no contact but loading on the belt causes loading on the harness or interaction between the seat belt and harness interferes with tightening the harness.	Parameter reworded to assess where the belt may be misrouted through the harness and assessment of the safety implications of this (e.g. effects on tightening, loading of the harness in the event of pretensioner deployment, etc).
V130	**EASE OF USING ANY BELT GUIDE, BELT LOCK OFF OR BELT POSITIONING FEATURE**	Follow CRS manufacturer's instructions for using any belt positioning feature, belt lock off, belt guide, belt routing feature or mechanism associated with routing the seat belt (if fitted)	Single action, can be achieved easily with one hand. Also use if no belt positioning or lock off device is needed	Two or less actions and/or two hands required.	Three actions required to use belt positioning device.	Four or more actions required to use belt positioning device.	Current research evidence shows single action results in less errors – wording revised to allow for increased scoring options. Examples of components/mechanisms that are covered included for clarity. .
V140	**EASE OF REMOVING SLACK FROM SEAT BELT OR FLEXIBLE ISOFIX CONNECTOR**	Assess for seat belt installation and, where fitted, ISOFix installation. For this assessment a tensile force measuring device capable of reading in 5N increments (minimum) and capable of reading a minimum of 40N should be used.	Slack can be removed using less than 70N	Slack can be removed by applying a force of more than 70N but less than 90N	Slack can be removed by applying a force of more than 90N or intervention required by user (e.g. moving CRS, hand feeding or guiding webbing)	Slack can not be adequately removed completely	Force requirements updated to provide improved differentiation. Explanation of condition where harness is considered 'sufficiently tight' added to remove ambiguity. Other

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
		For seat belt installation route the seatbelt through restraint for installation as per manufacturer's instructions using any belt positioning feature (but excluding any separate belt clamping device that is not integrated into the restraint or permanently affixed to the restraint) and connect seat belt buckle. Affix the force measuring device to the seat belt webbing at a point between the restraint and the retractor mechanism that is as close to the restraint as practically possible. Pull the force measuring device away from the restraint approximately in line with the sash portion of the belt from the point where the sash portion of the belt emerges from the CRS (unless the manufacturer has specified an angle within the instruction manual and on relevant labels) until the seat belt is sufficiently tight or a reading of 90N is achieved. Record the maximum force measured. For ISOFix connectors connect to vehicle ISOFix anchors as per CRS manufacturer's instructions. Affix the force measuring device as close to the free end of the ISOFix connector webbing as possible. Pull the force measuring device away from the connector until the ISOFix connector is sufficiently tight or a reading of more than 90N is achieved. Record the maximum force measured. For this parameter 'sufficiently tight' means no seat belt webbing or ISOFix connector webbing can be pinched between the thumb and forefinger. Where flexible ISOFix connectors are fitted assess for both seat belt and ISOFix connectors and score based on the worst performance of either. Where rigid ISOFix is fitted assess for seat belt only.					updates to method to improve clarity. ISOFix connectors incorporated into this parameter so that all forms of attachment to vehicle covered by one parameter.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
V150	**EASE OF TOP TETHER ATTACHMENT AND ADJUSTMENT**	For this assessment a tensile force measuring device capable of reading in 5N increments (minimum) and capable of reading a minimum of 40N should be used. Attach top tether to vehicle anchor and remove the majority of slack. Attach the force measuring device to end of top tether slack and pull top tether away from vehicle seat back (at approx. 90 degrees to seat +/- 10 degrees along CRS centerline +/- 10 degrees) until the top tether is sufficiently tight or until more than 90N has been reached. Record the maximum force measured. 'Sufficiently tight' means no top tether webbing can be pinched between the thumb and forefinger.	Automatic tightening (e.g. retractor) for top tether to become sufficiently tight.	<70N force for top tether to become sufficiently tight.	Between 70N and 90N load required for top tether to become sufficiently tight.	Greater than 90N for top tether to become sufficiently tight or slack cannot be fully removed from the top tether.	Method revised to allow for consistent assessment but also taking into account reasonable range of actuation/adjustment. Explanation of condition where harness is considered 'sufficiently tight' added to remove ambiguity. Other updates to method to improve clarity.
V152	**INDICATORS OF CORRECT TOP TETHER STRAP CONNECTION AND TIGHTENING**	Install CRS in vehicle and observe whether there is any indictor identifying that the top tether is correctly/incorrectly routed/attached and sufficiently tight. 'Sufficiently tight' means no top tether webbing can be pinched between the thumb and forefinger. Where an audible and/or visual indicator is present and engages check that the top tether is sufficiently tight for the loosest setting for which the indicator engages.	Correctly functioning audible and visual indicators of correct attachment and sufficient tightening of top tether strap	Correctly functioning audible or visual indicator of correct attachment and sufficient tightening of top tether strap.	No indicator of correct attachment and sufficient tightening of top tether strap.	Incorrectly functioning or faulty indicator.	Scoring of no indicator or incorrectly functioning indicator separated. Where an indicator is fitted a check that it is functioning correctly is included.
V153	**TOP TETHER ATTACHMENT TO CRS**	Assess for provision of separation of top tether into two separate parts. Where an audible and/or visual indicator is present and engages check that the top tether is correctly attached.	Top tether cannot be separated into two parts	Top tether can be separated into two parts which when separated trigger audible and visual indicators of disengagement	Top tether can be separated into two parts which when separated trigger either an audible or visual indicator of disengagement	Top tether can be separated into two parts which when separated do not trigger an indicator of disengagement or incorrectly functioning indicator.	Added condition for poor – that the indicator is incorrectly functioning. Where an indicator is fitted a check that it is functioning correctly is included
V154	**EASE OF STORING EXCESS TOP TETHER STRAP**	Locate storage for excess top tether strap. Assess whether the storage method is likely to prevent excess top tether strap from escaping during normal use or in the event of a crash.	Method of storage for top tether easily accessible and unlikely excess top tether strap may escape. (e.g. pouches with draw cord or Velcro closure). Select where excess top tether slack for this mode is <30cm. Select if no top tether.	.	Method of storage for top tether easily accessible but possible that excess top tether strap may escape.	Method of storage for top tether not easily accessible or excess top tether strap not well restrained	Examples of storage methods added, exclusion of CRS with less than 30cm of slack when CRS installed.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
V157	**INTERACTION BETWEEN HARNESS/TOP TETHER STRAP**	Assess whether there is any interaction or connection between the top tether or harness straps for any possible configuration of top tether and harness height position when the CRS in installed. There should be no interaction between top together and harness straps to avoid deterioration and/or difficulties with installation.	No interaction or contact between top tether and harness straps.			Interaction or contact between top tether and harness straps.	New parameter. Aimed to assess where the top tether and harness may interfere.
V158	**SUFFICIENT TOP TETHER LENGTH TO INSTALL CRS**	Assess whether top tether can be connected to vehicle anchorage on the vehicle seat back corresponding to the CRS installation position without the need for extenders.	Sufficient top tether length to install.			Insufficient top tether length to install.	New parameter aimed to assess where a CRS can be fitted into a limited number of vehicles based on top tether length.
V160	**INDICATOR OF CORRECT CRS INSTALLATION ANGLE (ON VEHICLE SEAT)**	Look for indication of seat back angle (e.g. level bubble) Where an audible and/or visual indicator is present and engages check that the CRS is within acceptable angles (as set out in the instruction manual) for the range of angles for which the indicator/s engage.	Correctly functioning visual indicator showing that CRS angle is within prescribed limits. Shows when CRS is within permissible range of installed angles and also shows when CRS it not within permissible range of installed angles	Correctly functioning visual indicator showing that CRS angle is within prescribed limits but does not show when CRS is not within permissible range of installed angles.	No visual indicator showing that CRS angle is within prescribed limits	Incorrectly functioning indicator.	Change to parameter name to better reflect focus of assessment. Wording changes to improve clarity. Added scoring option of incorrectly functioning indicator
V175	**EASE OF USING STABILISER BAR**	Where fitted, assess the stabiliser bar for method of deployment.	Deployment not needed (permanent fixture) or stabilizer bar not required.	Deployment needed, single action required by user (e.g. pull bar out and it locks into place)	Deployment needed with multiple steps.	Deployment difficult - mechanism binds, fails to lock into place and/or essential components not permanently attached t	Wording changes for clarity and to improve objectivity
V180	**ACCOMMODATION IN LARGE FAMILY SEDAN**	Only use an outboard seating position for this assessment. Set the driver's or passenger's seatback (whichever is directly in front of the CRS seat position) angle to 25 degrees (+/- 2 degrees) as measured by an angular measuring device placed on the back of the driver's seat within 10cm of the top of the seat back (not including hear rests) The measuring device shall have a length (along the vertical plane of the seat back) of no less than 15 centimeters. Move the seat to the rearmost position. Mark a position (on the vehicle fascia or trim) 10cm forward of the rearmost position and a marking 20cm forward of the rearmost position. Place the seatback in the forward most position. Install the restraint. Slide the seat backwards until it just touches the restraint. Move the seat forward with care until the seat locks in place. Note whether the seat is within the rearmost	Restraint can be accommodated with front passenger's/drivers seat in rearmost 10cm of travel	Restraint can be accommodated with front passenger's/drivers seat in rearmost 20cm of travel	Restraint can be accommodated with front passenger's/drivers seat further forward than the rearmost 20cm of travel	.	No change.

Para #	Parameter name	Method	Assessment requirements				Justification for Changes
		10cm of travel, between 10cm and 20cmfrom the rearmost position of travel or a position greater than 20cm from the rearmost position of travel.					
V190	EASE OF REMOVING RESTRAINT	Use the final seat position from V180 above. Remove installed CRS from vehicle. Use two hands if necessary, CRS can be rotated but should not get stuck on any part of the vehicle. Note that for CRS with a carrier and base the carrier should be separated from the base for this assessment and only the carrier section shall be assessed (i.e. there is no need to assess the base section).	Restraint can be easily removed from vehicle without having to change the position of the front passenger's/driver's seat	.	Front passenger's/driver's seat or seat back needs to be repositioned or there is adverse interaction between the CRS and another part of the vehicle	.	Change to method so that final position from V180 is used. Removal of ambiguous wording.

Table 2. Weighting Factors for Ease-of-Use Assessment Parameters

PARA #	PARAMETER NAME	REAR FACING SEATS	FORWARD FACING SEATS	BOOSTER SEAT
	INSTRUCTIONS			
I100	Instruction Manual Generally	2	2	2
I105	Instruction Videos	3	3	3
I110	Quick Set Up Guide	3	3	3
I120	Easy to Read Font (Text Clarity)	2	2	2
I130	Diagrams for Key Tasks	2	2	2
I131	Instructions for Accommodation In Vehicle	1	1	1
I135	Text Instructions for Key Tasks	3	3	3
I140	Age/Size Range Clearly Shown	3	3	3
I145	Information Related to Use of Shoulder Height Markers	3	3	3

PARA #	PARAMETER NAME	REAR FACING SEATS	FORWARD FACING SEATS	BOOSTER SEAT
I150	Modes of Use Clearly Shown	3	3	3
I160	Instructions for Routing Seat Belt	3	3	3
I161	Instructions Related to Importance of Removing Slack in Belt or Flexible ISOFix Connectors	4	4	.
I162	Instructions Related to Importance of Removing Twists in Seat Belt	4	4	4
I165	Instructions for Using Alternative Anchorages	4	4	4
I170	Instruction for Attaching and Tightening Top Tether	3	3	3
I171	Instructions Related to Importance of Removing Twists in Top Tether	4	4	4
I175	Instructions for Stowing Excess Top Tether Strap	4	4	4
I180	Instructions for Using Correct Harness Slots/Harness Shoulder Position (RF/FF) or Correct Belt Position (Booster seats)	4	4	4
I190	Warnings Related to Correct Use of Harness/Seat Belt	4	4	4
I210	Instruction Booklet Accessibility and Storage Location	2	2	2
I230	Information Related to Modes of Use, Child Size Range and Use of Shoulder Height Markers Provided in Other Language	4	4	4
	Labels			
L100	Labels Generally	2	2	2
L105	Easy to Read Font (Text Clarity)	2	2	2
L110	Label Diagrams for Key Tasks	3	3	3
L115	Sequential Numbering of Text Instructions on Labels	2	2	2
L120	Labels Related to Identifying Child Age Range	3	3	3

PARA #	PARAMETER NAME	REAR FACING SEATS	FORWARD FACING SEATS	BOOSTER SEAT
L130	Labels Related to Identifying Modes of Use	3	3	3
L140	Labels Related to Routing Seat Belt	4	4	4
L145	Labels Related to Importance of Removing Slack in Seat Belt or Flexible ISOFix Connectors	4	4	.
L146	Labels Related to Importance of Removing Twists in Belt	4	4	.
L150	Labels Related to Attaching and Tightening Top Tether	4	4	4
L155	Labels Related to Stowing Excess Top Tether Strap	4	4	.
L159	Labels Related to Changing Harness Slot Position/Harness Shoulder Height	3	3	3
L160	Labels Related to Using Correct Harness Slot/Harness Shoulder Height	3	3	.
L161	Labels Related to Using Belt Guide or Belt Positioning Feature	.	.	4
L165	Labels Related to Using Alternative Anchorages	4	4	4
L170	Warnings Related to Misuse of The Harness	4	4	.
L180	Labels Consistent with Instructions	1	1	1
L195	Labels Related to Correct Use Of Harness	4	4	.
L210	Visibility of Labels	2	2	2
L220	Identification of Stabiliser Bar	3	.	.
L230	Colour Coding of Labels by Mode of Use	4	4	4
	Packaging			
P100	Easy to Read Font (Text Clarity)	2	2	2
P110	Child Age/Size Range Clearly Shown	3	3	3

PARA #	PARAMETER NAME	REAR FACING SEATS	FORWARD FACING SEATS	BOOSTER SEAT
P120	Modes of Use Clearly Shown	3	3	3
P130	Accommodation in Vehicle	1	.	.
P140	Information Related to Modes of Use, Child Size Range and Use of Shoulder Height Markers in Other Language	4	4	4
	Child			
C100	Buckle Cannot Be Connected In Reverse	1	1	
C110	Indicators of Correct Connection of Harness Buckle	4	4	
C120	Harness Adjustment Actuator Accessibility	4	4	
C130	Harness Adjustment Easy to Tighten or Loosen	4	4	
C140	Indicators of Correct Harness Adjustment	5	5	
C160	Visibility and Alignment of Slots in Shell and Liner	2	2	
C170	Method of Changing Height of Shoulder Straps	3	3	
C171	Physical Actions to Change Position of Shoulder Straps	3	3	
C175	Crotch Strap Adjustment	3	3	3
C185	Liner/Harness Interaction	3	3	
C187	Harness Routing Consistent between Modes	3		
C190	Removal of Cover	3	3	
C200	Removal of Child When Top Tether Attached	1		
C210	Indicators of either of Child's Arms Being Free From Harness	5	5	5
C230	Indicators of Correct Positioning of Lap-Sash Belt on Booster Seats	.	.	5
C250	Ease of Seat Back Height Adjustment	.	2	2

PARA #	PARAMETER NAME	REAR FACING SEATS	FORWARD FACING SEATS	BOOSTER SEAT
	Vehicle Installation			
V100	Indicators of Correct Seat Belt Routing or Correctly Connected ISOFix Connectors	5	5	.
V120	Ease of Achieving Correct Belt Routing or Correct ISOFix Connection	4	4	4
V121	Insufficient Seat Belt or ISOFix Connector Length to Install CRS	1	1	1
V125	Propensity to Misroute Seat Belt Around Harness Webbing	2	2	
V130	Ease of Using Any Belt Guide, Belt Lock-off or Belt Positioning Feature	3	3	3
V140	Ease of Removing Slack from Seat Belt or Flexible ISOFix Connector	4	4	
V150	Ease of Top Tether Attachment and Adjustment	4	4	
V152	Indicators of Correct Top Tether Strap Connection and Tightening	5	5	
V153	Top Tether Attachment to CRS	2	2	
V154	Ease of Storing Excess Top Tether Strap	4	4	
V157	Interaction between Harness/Top Tether Strap	2	2	
V158	Sufficient Top Tether Length to Install CRS	1	1	1
V160	Indicator of Correct CRS Installation Angle (on Vehicle Seat)	1	1	1
V175	Ease of Using Stabiliser Bar	3		
V180	Accommodation in Large Family Sedan	2	2	2
V190	Ease of Removing Restraint	2	2	2