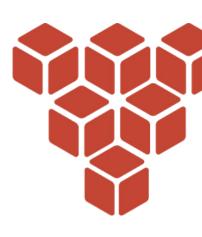


Crash Recovery System User Manual CRS Online Edition

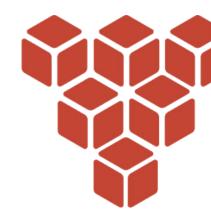




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Chapter 1 Introduction



Crash Recovery System Online Edition (CRS Online Edition), the vehicle information database for rescue workers around the world. Crash Recovery System Online Edition has been specifically designed for stationary users, such as in rescue coordination centres.

The Crash Recovery System supports emergency teams when rescuing people from vehicles involved in an accident. In just a few seconds, the system provides a complete overview of those safety systems that may put emergency teams and accident victims at risk during the rescue.

The system shows the position of safety and drive systems and provides important information on how to deactivate them. Having all of the necessary data immediately available can save valuable time for a successful rescue.

CRS Online Edition enables the user to easily transfer the type of vehicle via datasheet ID and generate vehicle information in PDF format.

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Technical specifications / System requirements

Screen resolution: At least 1024 x 768 pixels

Browser: Internet Explorer 9 (and higher), Opera 9 (and higher),

Firefox 54 (and higher), Safari 10 (and higher), Chrome 60 (and higher)

Plug-ins Adobe SVG Viewer 3.0 (only for Internet Explorer 8)

JavaScript must be enabled

Additional software: Adobe Acrobat Reader 5 or higher

URL: https://www.crashrecoverysystem.com,

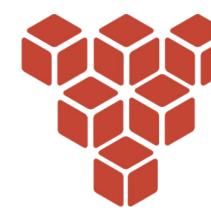
https://wws.crashrecoverysystem.com (via port 433)

Update database

The CRS Online Edition database is updated automatically. A manual update is not required.

Support

Please contact us on crs.support@bliksund.com if you need help.



Chapter 2 Installation

Introduction

No software needs to be installed in order to use Crash Recovery System Online Edition. CRS Online Edition can therefore be run on any PC with access to the Internet. The system requirements (see technical specifications) must be met, and access to the secured NdB network with an authorised IP address is necessary. The IP address should start with 192.168.x.x.

Calling up CRS Online Edition

Crash Recovery System Online Edition is launched by calling up the website https://www.crashrecoverysystem.com/crswebedition in the Internet browser. Log on with the license code and corresponding password.



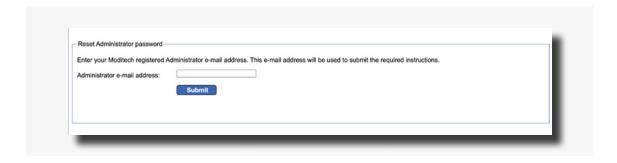
Calling up CRS Online Edition > Password management

If you don't have an administrator password yet or have forgotten your administrator password, you should **first create a new password for your administrator account via**

https://www.crashrecoverysystem.com/crswebedition/index.php?menu=password_forgotten.

You can then log in to the start screen of the online edition (https://www.crashrecoverysystem.com/crswebedition) with your administrator name and newly saved password. Here you can change your password for the Online Edition.

With your **licence code** and newly saved password (**not** the administrator password) you can then log in to the online edition (https://www.crashrecoverysystem.com/crswebedition).





Please note:

We inform the system administrator of the password expiry. Only the system administrator is authorised to change the password of a CRS Online Edition.

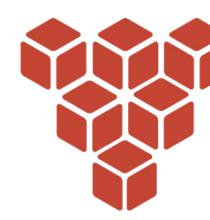
The linked password should be renewed every 90 days. Enter your details and click "Save". Your password must be at least 10 characters long and contain at least one upper case letter, one lower case letter, one number and one special character !#\$%/:=?@_[][.]

The responsible system administrator can be forwarded to Bliksund AS via crs.support@bliksund.com.

Calling up CRS Online Edition with mission control system

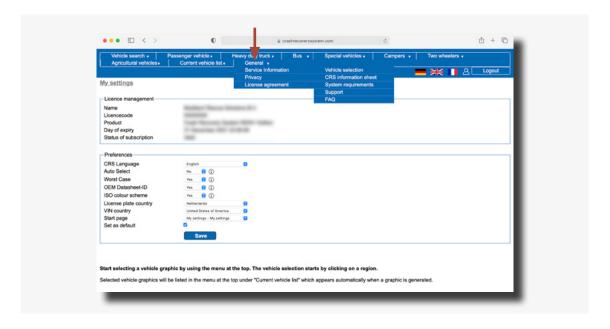
If you are using a mission control system such as ISE Cobra, DATUS, Scheusner, we recommend contacting your provider for an interface with our CRS Online Edition.

Chapter 3 **Settings**



General

When Crash Recovery System Online Edition is started, the home screen is displayed. In the top menu you can find helpful user information under the General button.



It is devided in Service information (Vehicle selection, CRS information sheet, System requirements, Support and FAQ), Privacy and License agreement.

Vehicle selection How to select a vehicle, step by step.

CRS information sheet Explains the use of a CRS Rescuesheet.

System requirements Shows the hardware and software required to use this webapplication.

Support Shows contact information when you have problems or questions.

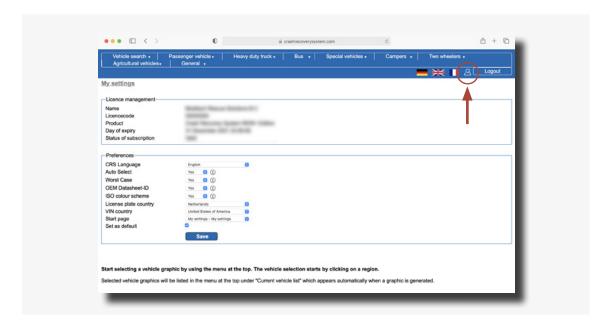
FAQ Here you can find the Frequently Asked Questions.

Privacy Important information about our privacy policy.

License agreement Here you can find the License Agreement between you and Bliksund AS.

Settings

Settings in Crash Recovery System Online Edition can be modified under the menu item Settings. The following options for settings are available there:



CRS language Select the language used in the vehicle graphics.

Auto Select Automatically selects, in manual vehicle selection, provided that only one

option is available in vehicle selection.

Worst Case Automatically selects, in manual vehicle selection, the vehicle with all

available options (model with question mark). Selection of engine type is not

required.

OEM Datasheet-ID Also shows the OEM datasheet ID in addition to the CRS datasheet ID.

ISO colour scheme Select this option to use the official ISO colours in the vehicle datasheets.

License plate country Selects the country to be used as a default for vehicle licence plate

requests.

VIN country Selects the country to be used as a default for VIN requests.

Start page Select the preferred home page here.

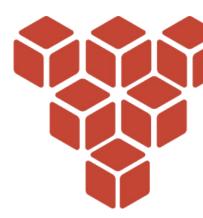
Set as default Sets these settings as default when starting CRS.

Please note:

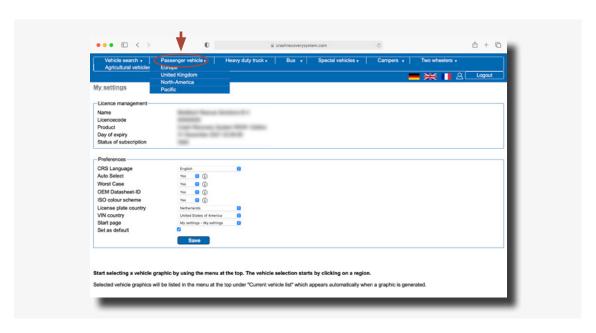
Select Save to save the changes made to your settings.

Chapter 4

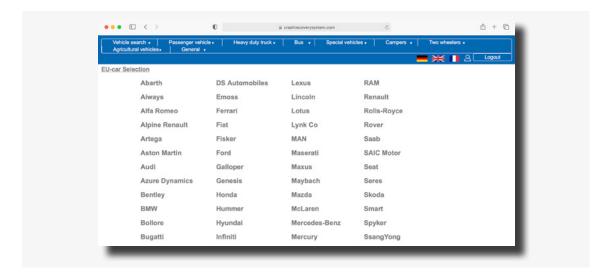
Vehicle selection



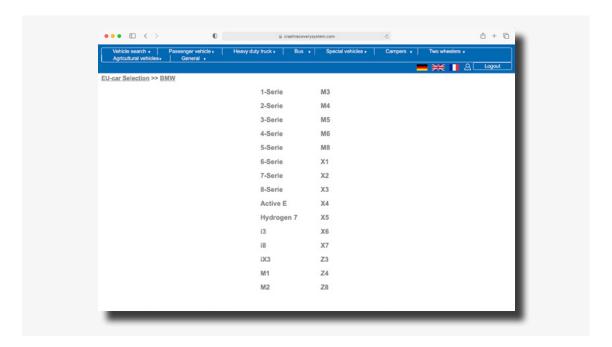
Manual vehicle selection



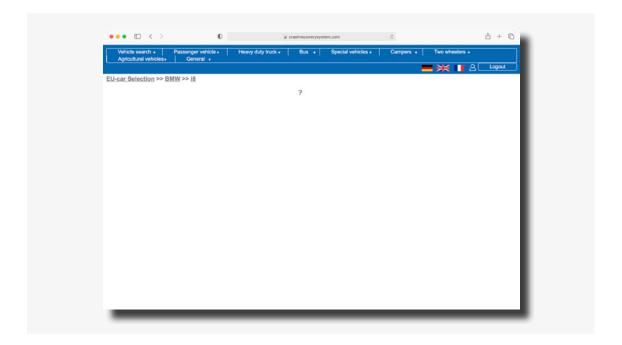
Select the database to be used for the vehicle selection. The available databases are divided into regions (e.g. Europe or North-America) and vehicle type (Passenger vehicle, Heavy duty truck, Bus, Special vehicles, Campers, Two wheelers or Agricultural vehicles). The databases contain all vehicles currently or previously sold on the corresponding market and fitted with at least one (optional) airbag. A list of vehicle manufacturers is displayed:



After selecting the manufacturer (in this case BMW) a list of available models is displayed.



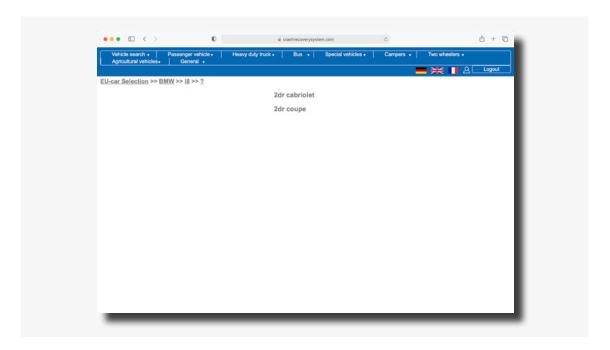
After selecting the corresponding model, a list of available engine types is displayed. Select? if you are unsure of the engine type. The? shows the model with maximum options.



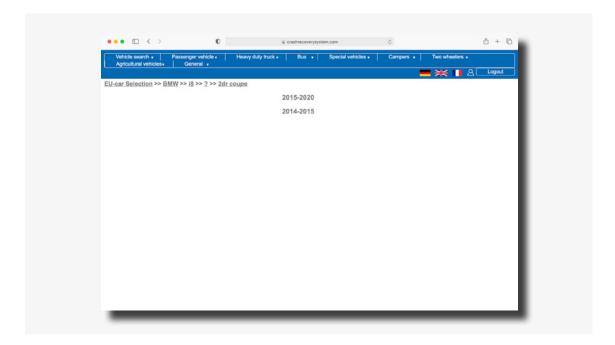
Please note:

If the Auto selection option has been activated, then selection steps with only one option are automatically skipped.

In the next selection step, the body design must be selected.



The last selection step is the selection of the model year. Choose the right option and the CRS Rescuesheet will be immediately displayed.

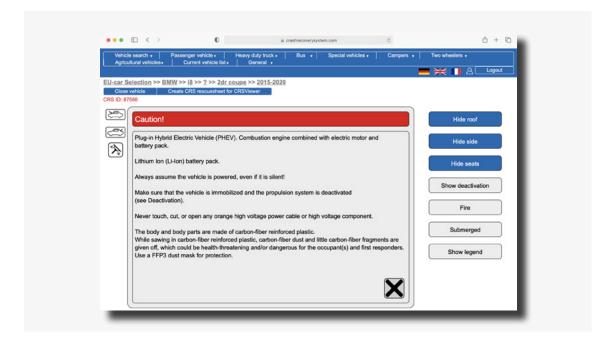


Please note:

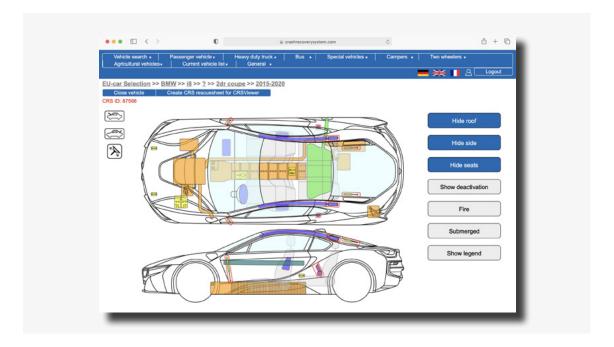
You can return to an earlier vehicle selection step at any time by clicking a selection in the information bar. Example: From the BMW selection, return to the selection of possible BMW models.

If the selected vehicle is a model with hybrid, electric or hydrogen transmission, then an information screen is displayed (RDW Edition only). This screen contains important information on how to proceed with the vehicle.

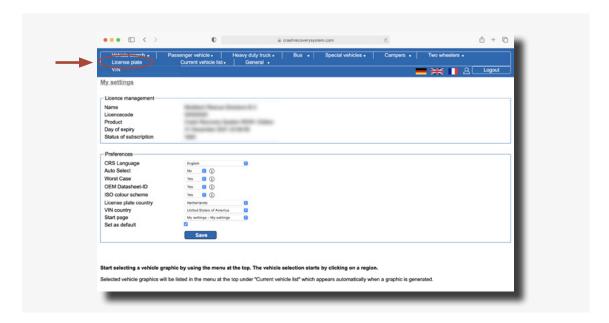
Clicking the X button in the bottom right corner hides the information screen, and the selected vehicle can be seen.



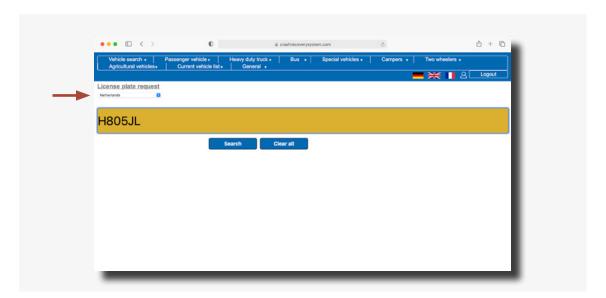
If it is not a vehicle with hybrid, electric or hydrogen transmission, then the CRS Rescuesheet is immediately displayed. The vehicle selection using the manual selection procedure has been completed.



Request license plate number (RDW edition)



Select Vehicle search and Licence plate in the top left corner of the menu, to display a window where you can enter a vehicle license plate number. Using the drop-down menu, the country of origin of the license plate can be specified.



Please note:

Since the modification to vehicle registration legislation, interchangeable plates can be issued in Germany since 1 July 2012. This basically means that there is an interchangeable plate comprising an interchangeable element (which must be switched before the journey) and a fixed vehicle-specific part for each vehicle (see photo on next page). In the central vehicle register of the Federal Office for Motor Vehicles, the complete license number assigned to the vehicle is registered, comprising the common part and the vehicle-specific part.

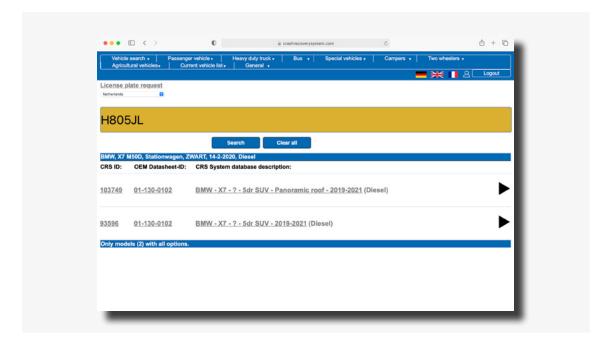


In the example shown in the photo, two different license plate number requests are then possible, namely:

B VM 146 (common part) + 1 (vehicle-specific part) = **B VM 1461**B VM 146 (common part) + 2 (vehicle-specific part) = **B VM 1462**

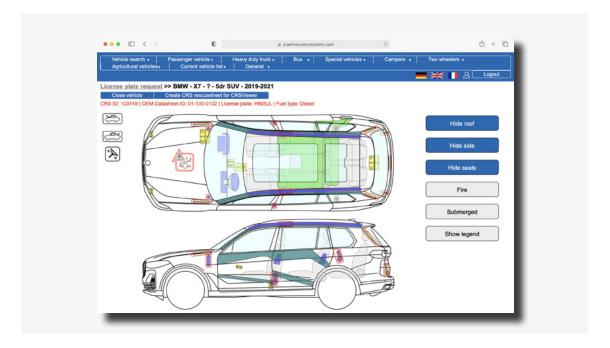
Press Search or the return key to start the vehicle license plate number request. A successful request displays the request result. If the data from the national vehicle register is not clear, then several options are proposed, if applicable. The data sheet ID is also displayed and can be communicated in a timely manner.

In the next selection step, the right body design must be selected.

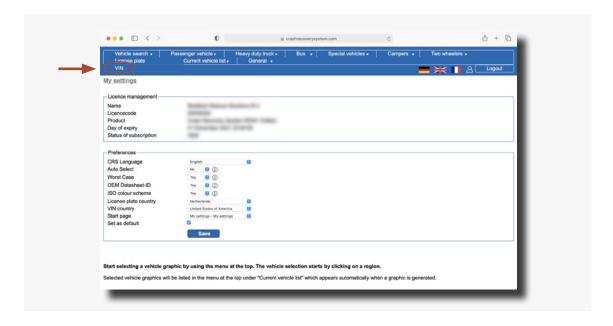


If the selected vehicle is a model with hybrid, electric or hydrogen transmission, then an information screen is displayed (RDW Edition only). This screen contains important information on how to proceed with the vehicle. Clicking the X button in the bottom right corner hides the information screen, and the selected vehicle can be seen.

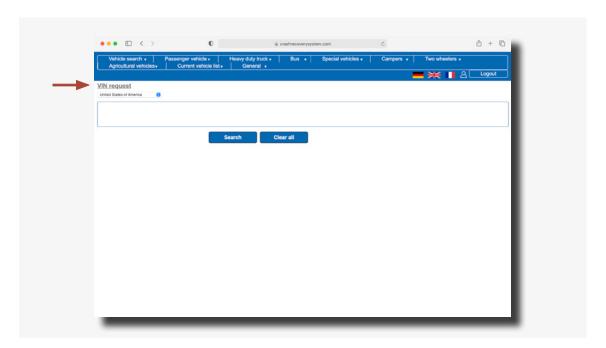
If it is not a vehicle with hybrid, electric or hydrogen transmission, then the CRS Rescuesheet is immediately displayed. The vehicle selection by requesting a licence plate has been completed.



VIN request (RDW edition)

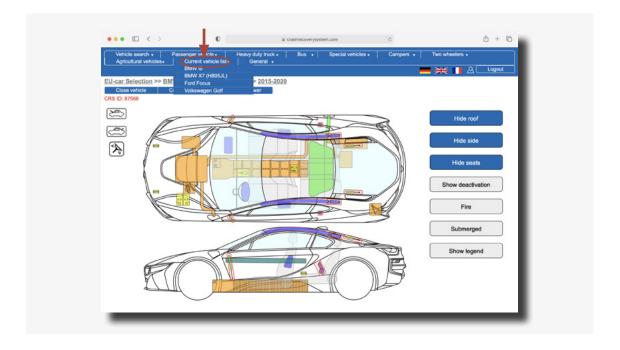


Select Vehicle search and VIN in the top left corner of the menu to display a window where a vehicle identification number (VIN) can be entered. Using the drop-down menu, the VIN country of origin can be specified. Press Search or the return key to start the VIN request. The request result is presented in a manner similar to the <u>license plate number request</u>.

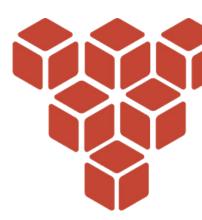


Current vehicle list

Each CRS Rescuesheet that is requested in CRS Online Edition, is automatically added to the vehicle list. Select Current vehicle list in the top menu to display a list that allows you to switch quickly and easily between multiple, previously opened CRS Rescuesheets. The Close vehicle button in a CRS Rescuesheet closes the current selection, and the vehicle is no longer displayed in the Current vehicle list.

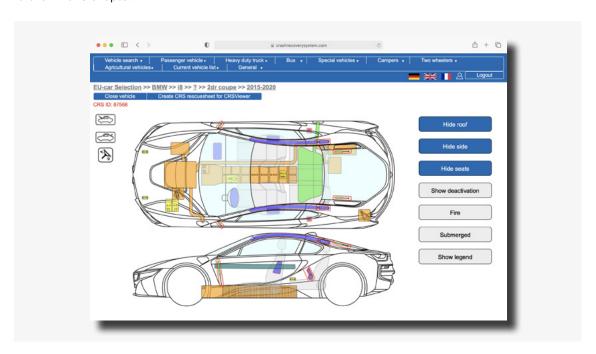


Chapter 5 CRS Rescuesheet



The vehicle image within the CRS Rescuesheet is an interactive image, unless you have a Lite Edition where the image is static. In all CRS editions, you can show or hide the roof, side and seats by clicking on the Show/Hide buttons. In addition, information on any component can be retrieved directly by clicking on it (CRS Online RDW Edition only).

All components are shown in their actual locations in the vehicle. General components applicable to the vehicle, such as bonnet opening, boot opening or steering column adjustment, are shown with icons on the left side of the CRS Rescuesheet. The operation of the CRS Rescuesheet is explained further in this chapter.



The displayed CRS datasheet ID facilitates communication between the CRS Online Edition user and CRS. The CRS datasheet ID can be sent wirelessly and entered in all versions of CRS. The associated vehicle is then selected directly. The OEM datasheet ID can also be displayed as an option, provided that it is available. The OEM datasheet ID can also be used for vehicle selection on a remote terminal.

Please note:

The OEM datasheet ID is less precise and always refers to the vehicle with the maximum fittings. Situations may arise where a CRS datasheet ID is displayed, but there is no OEM datasheet ID.

Buttons

Two buttons are located under the information bar. The Close vehicle button closes the current selection. The vehicle is no longer displayed in the <u>Current vehicle list</u>. The <u>Create CRS rescuesheet for CRS Viewer button</u> generates a PDF file containing the CRS Rescuesheet and all interactive information as well as the available photos. The PDF file will be generated in the background. When the file creation is complete, the (encrypted) PDF-file is automatically made available for 24 hours to local firebrigades using a CRSViewer.

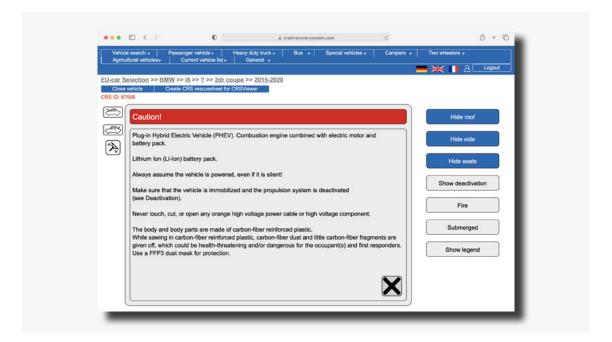
To the right of the vehicle image that appears, several buttons are visible. The Hide Roof, Hide Side and Hide Seats buttons can be used to show or hide parts of vehicles. After clicking, the buttons change colour. Hidden sections can be re-displayed by clicking the buttons again.

The Deactivation button is used for vehicles with alternative drives (e.g. hybrid cars). The Fire and Submerged buttons can be consulted when a vehicle is on fire or in water. With the Show legend button the legend, including an explanation of all component groups, can be displayed. For a complete overview with information on components, see Chapter 6: Overview of Components.

Please note:

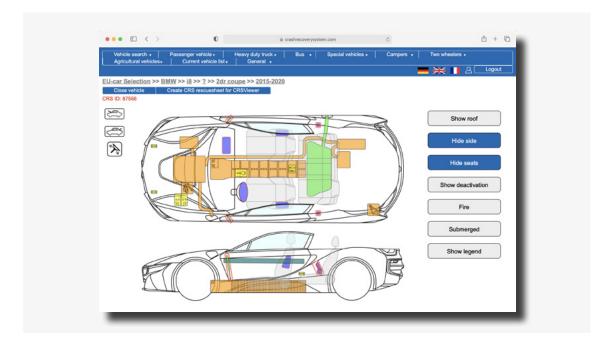
If the selected model is a vehicle with an alternative drive (electric or hybrid), when the CRS Rescuesheet is opened, the CRS immediately displays a warning screen with information on the type of drive.

By clicking on the Cross icon the warning screen disappears and the vehicle image appears.



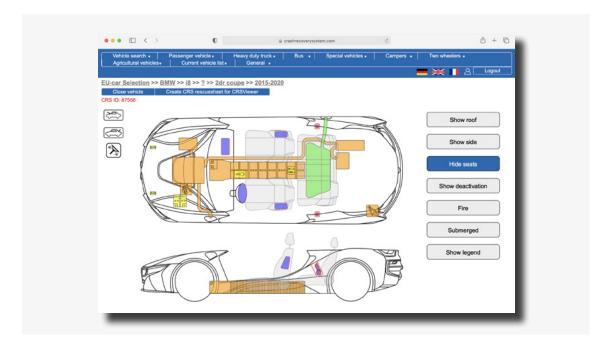
Buttons > Hide roof

Select the Hide roof button and the roof of the vehicle, with all integrated components, is immediately hidden. This makes all components in the car clickable, such as airbags and the steering column. The roof is shown again after clicking the Show roof button.



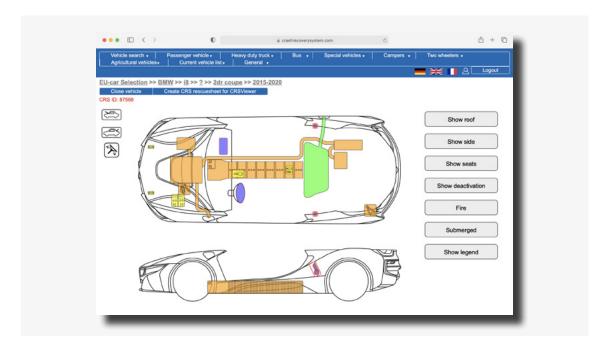
Buttons > Hide side

The sides are shown and hidden with the Hide side and Show side buttons. The location of all components on the sides, such as the seat airbag, is now immediately clear. These can now also be clicked on.



Buttons > Hide seats

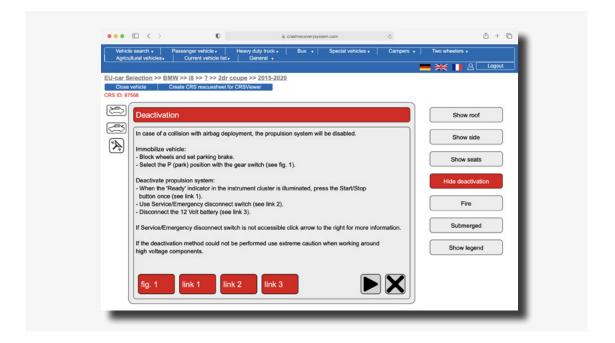
The seats are hidden with the Hide seats button. The location of all components on and under the base plate, such as the SRS sensor and the fuel tank, is now immediately clear. These can now also be clicked on. The seats are shown again after clicking the Show seats button.



Buttons > Show deactivation

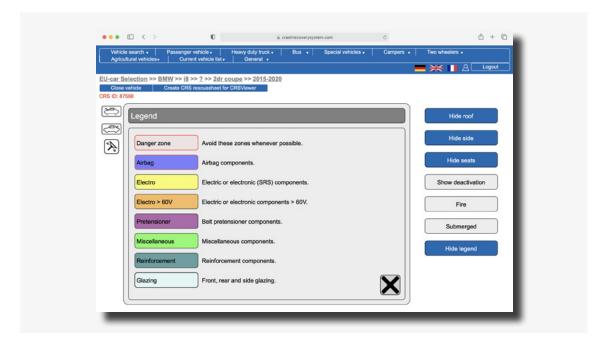
In the vehicle image of an alternatively powered vehicle, the Deactivation button is present. When this button is selected, the screen with instructions on how to deactivate the vehicle appears.

By clicking on the Cross icon or the Deactivation button the screen disappears and the vehicle image reappears.



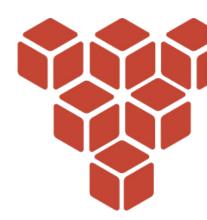
Buttons > Show legend

The Show legend button displays an overview of the definitions of the colours used in the CRS vehicle image. By clicking on the Cross icon or the Hide legend button the screen disappears and the vehicle image reappears.



Chapter 6

Overview of Components



Dangerzone



Dangerzone. The components **outlined in red** indicate components that are potentially dangerous during the rescue process.



Dangerzone driver and passenger airbag. Driver and passenger airbags outlined in **red indicate** dual stage airbags, whereby one stage may remain active after activation of the airbag. It also indicates a mechanical driver airbag which can be activated using mechanical force.

Airbag



Driver airbag



Stored gas inflator (for curtain airbags)



In dashboard: Passenger airbag In seat: Antisubmarining airbag



Curtain airbag (Head impact)



Side impact airbag (Seat)



Knee-airbag driver



Side impact airbag (Side)



Knee-airbag passenger

Belt pretensioner



Belt pretensioner

Hydrogen



Gas (H2) pressure direction



Gas tank with gas type indication (H2)



Automatic hydrogen overpressure safety valve with gas type indication (H2)



Manual gas shut-off valve with gas type indication (H2)



Gas line (H2)



Fuel cell component

Electronics > 30 V



Battery pack



High voltage component



Ultra-capacitor (> 30 V)



Low voltage device that disconnects high voltage



Emergency disconnect (Cut cable)



High voltage device that disconnects high voltage



High voltage power cable



Special battery access



Pantograph down (buses only)



Pantograph up (buses only)



Fuse box disabling high voltage

Electro



Sensor side/front



Sensor side/front (mechanical)



Battery (12 V)



Backup power- supply (if separate from SRS control unit. Ultracapacitor (< 30 V)



Truck/Bus battery (24 V)



Start/Stop Button (Engine and Contact). For trucks/buses engine only.



SRS control unit Roll bar control unit



Main battery switch



Seat occupancy sensor (if it can affect deployment of airbags)



Fuel warning indicator



Xenon lights



Solar panel

Seats



Front seat top view



Back seat top view



Front seat / back seat side view



Truck seat side view

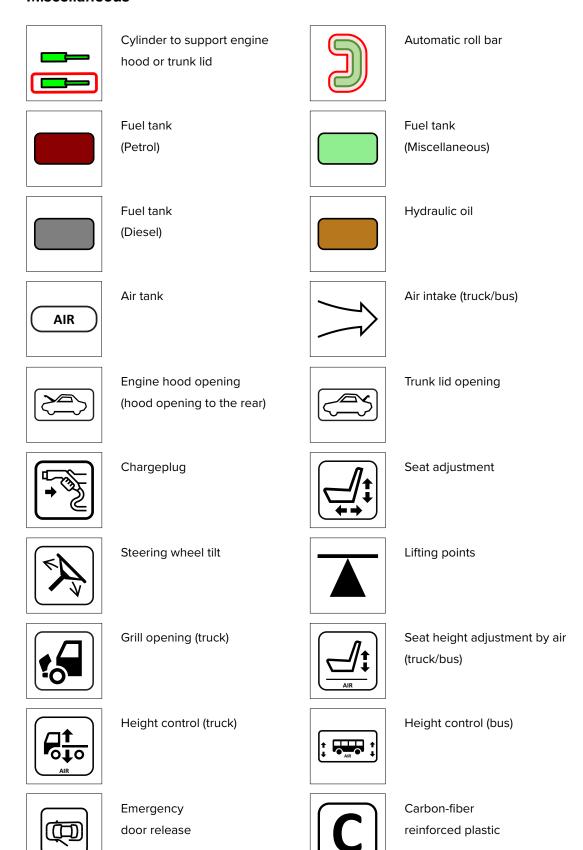


Truck bed top view



Truck bed side view

Miscellaneous





Pedestrian protection system



Automatic fire suppression



Remove smart key/ starter key



Emergency exit left hand



Emergency exit right hand



Emergency door opener



Break to obtain access



Emergency exit roof hatch (buses/coaches only)



Cabin suspension (trucks only)



Cabin tilting (trucks only)



Driver rest area (buses/coaches only)



Toilet cabin (buses/coaches only)



Power Take-Off (PTO) (tractors only)



Nitrogen gas bulbs (tractors only)



Gas line (generic)



Gas pressure direction



Gas tank with gas type indication (CNG)



Manual gas shut-off valve with gas type indication (CNG)



Automatic gas overpressure safety valve with gas type indication (CNG)



Gas tank with gas type indication (LPG)



Manual gas shut-off valve with gas type indication (LPG)



Automatic gas overpressure safety valve with gas type indication (LPG)



Gas tank with gas type indication (DME)



Manual gas shut-off valve with gas type indication (DME)



Automatic gas overpressure safety valve with gas type indication (DME)



Gas tank with gas type indication (LNG)



Manual gas shut-off valve with gas type indication (LNG)



Automatic gas overpressure safety valve with gas type indication (LNG)

Air conditioning

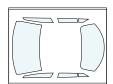


Air conditioning component



Air conditioning line

Glazing



Glazing, glass or plastic, tempered or laminated

Reinforcement



Reinforcement components in bodywork

Road Assist Edition



Automatic gearbox



Electric parking brake



Recovery



On-board diagnostics

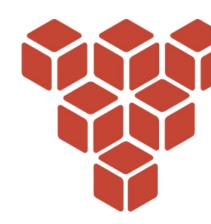


Jump-starting



Inertia switch

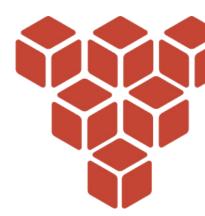
Chapter 7 **Warranty**



In the event that the CRS software does not function properly after it has been put into operation due to a manufacturing or material defect, the Licensee shall be entitled to call upon the warranty, provided that the defect was not caused by improper use of the software.

This user manual is an integral part of the Licence Agreement and the General Terms and Conditions of Bliksund AS For other warranty provisions, please refer to the General Terms and Conditions of Bliksund AS and the Licence Agreement.

Chapter 8 Liability



The images and information in the CRS were obtained and compiled from reliable sources within the automotive industry.

Bliksund AS has made every effort to ensure that this data is correct and corresponds to the selected vehicle models, but selection errors, production modifications, mistakes or missing items may occur.

Bliksund AS does not claim any liability and can also not be held liable for physical or material damage or loss as a result of one or more of the aforementioned causes.

The liability of Bliksund AS for damage suffered by the Licensee, irrespective of the basis for such damage, shall at all times be limited to a maximum amount equivalent to the licence fee paid by the Licensee under the Licence Agreement.

The liability of Bliksund AS for indirect or consequential damage is excluded.

The Licensee can only claim compensation for damage as referred to in the above article if it was caused by an attributable shortcoming or wrongful act on the part of Bliksund AS, and if, after having been duly served with a notice of default by the Licensee, the shortcoming has not been remedied within a reasonable period.

The Licensee must follow the instructions contained in this User Manual when using the software. Any use other than described in the user manual of the regulations mentioned here or failure to implement these regulations in the correct order can never lead to Bliksund AS being held liable.

If the software has not been updated to the most recent version, Bliksund AS excludes all liability.

Any claim by the Licensee will lapse if it has not been filed within one year after the cause of which could have reasonably been known. All claims by the Licensee are subject to the jurisdiction of and must be filed with the courts in Alkmaar, the Netherlands.

