Mercedes-Benz

**Workshop Information System (W I S)**
**User Documentation**
**WIS/ASRA G.07.03**

## List of Contents

# Preface

The Workshop Information System (WIS) is a modern DP supported information system.

It not only replaces the workshop documentation available to date on paper and microfilm, but also offers a multitude of possibilities for attaining information required.

Knowledge required for optimum use of "WIS" is imparted with the help of user documentation together with the "Workshop Information System" (WIS) course.

All the WIS functions are dealt with clearly and comprehensibly using text and illustrations.

Fast access to individual chapters in this documentation is ensured by a clear list of contents. A comprehensive, alphabetically sorted index facilitates access to all important terms found in the text.

The description of the user documentation is based on the "**MB-WIS Version G.07.03**" software version.

# 1          General information

With the "Workshop Information System (WIS)" DaimlerChrysler AG's aim is to improve the electronic availability and use-fulness of the workshop documentation  (e.g. repair, maintenance, basic data, wiring diagrams and in part also documen-tation organization) of Mercedes-Benz and smart products by optimizing access and presentation.
WIS also offers integration to neighboring task areas such as e.g. definition of work units and flat rates using ASRA, and damage coding on one workstation.

**The following criteria have been taken into consideration:**
* Modern electronic information system to replace the microfilm and paper media.
* Faster document search and display.
* Simplification of document search.
* Simple system operation.
* Access option to vehicle-specific data (vehicle datacard of EPC system).
* Vehicle-specific documentation finding.
* Simplification of warranty settlement by integrating the damage coding in WIS.
* Documentation access using operation number.
* Definition of work units or flat rates using ASRA.

**The system offers:**
* Increased productivity and speed during the documentation search and shorter waiting times for the workshop per-sonnel accompanying this.
* Operation using mouse or keyboard.
* Automated documentation search.
* Damage coding (for warranty settlement).
* Call of the vehicle datacard from the EPC system with code identification written in full.
* ASRA data, basis for creating orders, invoices and warranty applications.
* Dynamic, vehicle-related generation of service sheets with an interface to ASRA.

## 1.1          User groups

There are various user groups in WIS.

| | |
|---|---|
| **WIS/ASRA User** | User in workshop area. |
| **System administrator** | Access to all levels (can create, delete users in the DB Program Manager, undertake general and user-specific system configurations, ...).. |

## 1.2        System platforms for WIS/ASRA

The "Workshop Information System (WIS)" is available on the following system platforms:

- Windows NT 4.0 (Client/Server)
- Windows 2000 (Client/Server)
- Windows XP Professional

## 1.3        Documentation for the WIS user

Information on the use of the Workshop Information System (WIS) is available in various depths of description and in various formats.

**Documentation for the WIS user**

| Publication format | Contents | Title | Call using |
|---|---|---|---|
| **Electronic documentation in PDF format**<br>ⓘ If the PDF file is not legible, the PDF Acrobat reader can be installed using the WIS/ASRA DVD, in the directory $\backslash WIS \backslash Readme \backslash Reader$. | Detailed description of all functions and masks in WIS.<br>The entire user documentation can be displayed and printed out if required using the navigation bar in the PDF file. | Workshop Information System (WIS), User documentation, WIS/ASRA G.07.03 | • **Help** in WIS (F7).<br>The Help text refers to the current mask. The entire user documentation can be displayed and printed out if required using the navigation bar in Help.<br>**or**<br>• the program symbol "**MB-DOC**" in the "DB Program Manager".<br>All WIS/ASRA and EPC documentation for users and system administrators is available via this symbol.<br>**or**<br>• the **WIS/ASRA DVD**.<br>If the DVD is in the drive, the "Open" command can be activated using the right-hand mouse button.<br>A start page can be opened via $\backslash WIS \backslash Readme \backslash start.pdf$.<br>Here, all WIS/ASRA and EPC documentation for users and system administrators is available. |
| **WIS Document (CASE 2)** | Description in brief of all new and modified functions on a software update. | The most important information on new items and revisions in the new release of the Workshop Information System (WIS). | • Enter the document number *OV0001P0101%* in the input box "Document No." in "Infobox 1".<br>**or**<br>• What is new?/Top News/Selection of a vehicle type/Document "Main information on new items and revisions in the new Workshop Information System (WIS)" |

## 2        Basics

ⓘ        **Knowledge imparted in the "Basics" chapter is vital for operating WIS. The operating elements are described in detail in this chapter.**

All actions in WIS can be executed with the mouse or keyboard.

## 2.1        Mouse operation

Only the **left** mouse button functions in WIS. Double-clicking is **not** possible.

## 2.2        Keyboard operation

The keyboard is an input device which can transfer commands to WIS.
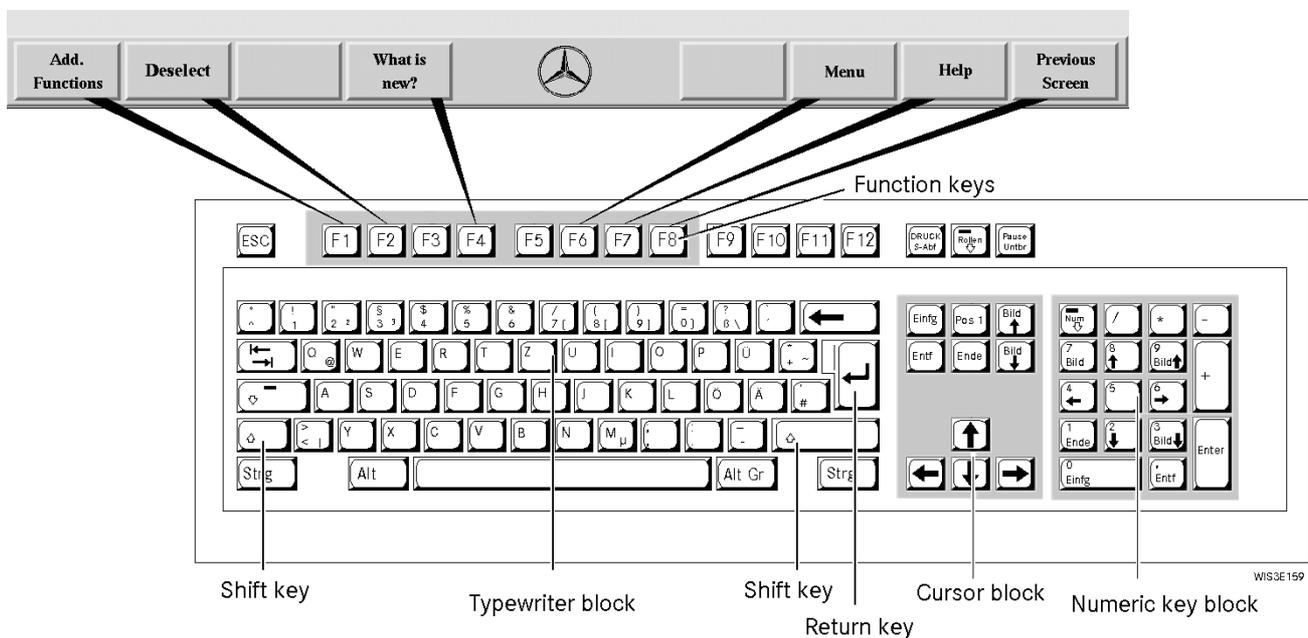


In the following you will find the meaning and functions of the keys required in WIS.

| Key(s) | Name | Function |
|---|---|---|
| F1 to F8 | **Function keys** | The F1 to F8 function keys always correspond to the screen display in the function bar. As the function bar offers different activities depending on the mask, the assignment of the function keys changes depending on the mask display. |
| ⇥ | **Tab key** | Moves the selection frame. 📖 see section "2.4.1 Selection frame". |
| ⟵ | **Back key** | Deletes the last character in the input boxes.<br>📖 see section "2.4.3 Input box". |

| | | |
|---|---|---|
| `Return` | **Return key** | Acknowledgement of the input or the command. |
| | | ⓘ The Return and Enter keys have the same function. |
| `Enter` | **Enter key** | Acknowledgement of the input or the command. |
| | | ⓘ The Return and Enter keys have the same function. |
| ← ↑ ↓ → | **Cursor keys** | Moves the selection frame 📖 see section "2.4.1 Selection frame". |
| `Page ↑` | **Page up** | Pages back one screen within a document or a menu. |
| `Page ↓` | **Page down** | Pages forwards one screen within a document or a menu. |
| `Alt` | **Alt** | The `Alt` key in combination with other keys calls the keyboard shortcuts, e.g. `Alt` + N for next document. |
| `Del` | **Delete** | Deletes the contents of input boxes. |
| + | **Plus** | Moves the selection frame within a document **forwards** |
| | | • from figure to figure, |
| | | • from reference to reference, |
| | | • from figure to reference or vice versa. |
| − | **Minus** | Moves the selection frame within a document **backwards** |
| | | • from figure to figure, |
| | | • from reference to reference, |
| | | • from figure to reference or vice versa. |

## 2.3      Mask layout/Windowing

The WIS mask is a standard Windows mask. The window can be minimized to a symbol in the Windows task bar ④, if required, or can be scaled to any size. 📖 see section "2.3.1 Windows task bar".
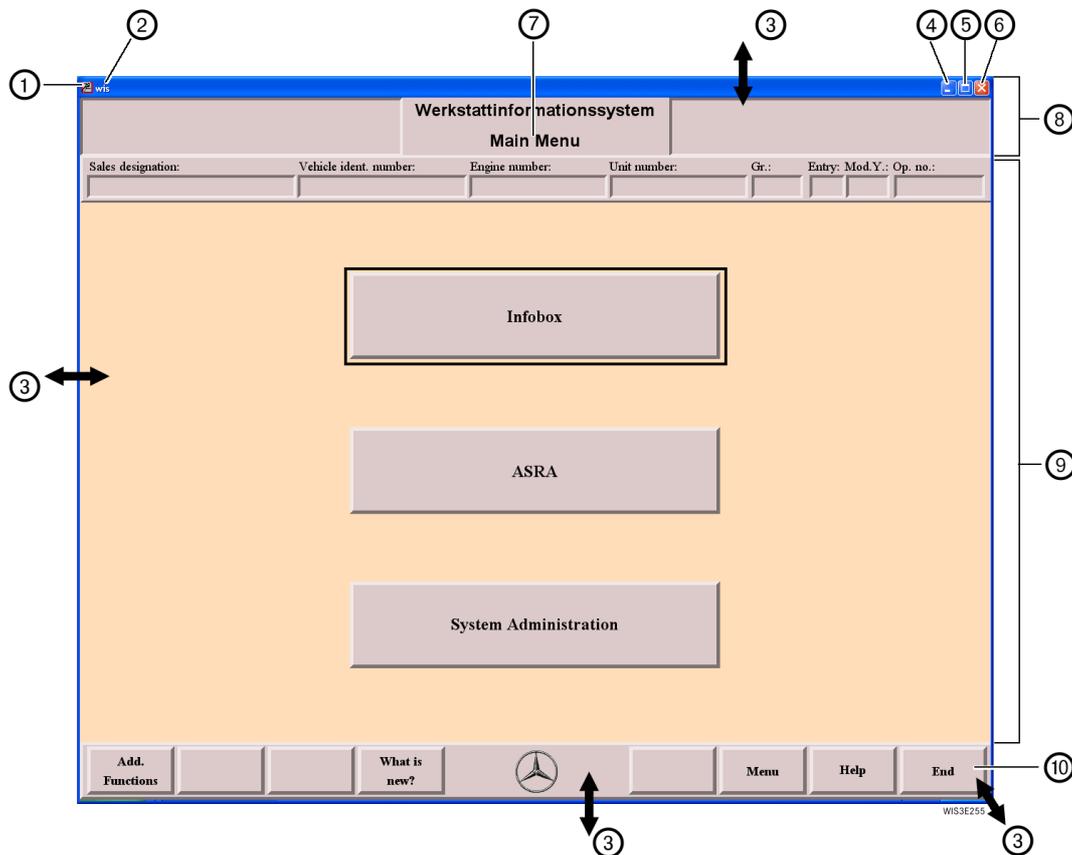


| | | |
|---|---|---|
| ① | **System menu** | The "System menu" contains a selection of different functions, which enable you to move, minimize, maximize, close and change the size of the WIS window. |
| ② | **Title bar** | Contains the title of the program. To move the program window, select the title bar, hold the mouse button and drag the mouse pointer to the new position. |
| ③ | **Window size** | If you move the mouse pointer to the corner or border of a window, the window changes its shape.<br>Press and hold the mouse button and move the mouse pointer to change the window size as follows:<br>Corner of window = vertically **and** horizontally<br>Border of window = vertically **or** horizontally |
| ④ | **Icon field** | The window is displayed as an icon which appears on the "Windows task bar". The program remains active, and the current contents of your work remain unchanged. Use the key combination ⎡Alt⎤ + ⎡⇆⎤ or select the program icon from the "Windows task bar" to return to that program. 📖 see section "2.3.1 Windows task bar". |
| ⑤ | **Full screen/ Original size** | Use this function to switch between full-screen view and original size (the window is displayed in its most recent dimensions). |
| ⑥ | **Close** | Closes the program. |
| ⑦ | **Mask heading** | Contains the heading of the mask (e.g. Main Menu). The mask heading helps the user identify the mask in which he is working. |

⑧ **Header area**     Contains information boxes depending on the contents of the work area.

**Inputs are not possible.**

The header area contains vehicle data (e.g. sales designation, vehicle ident. number, engine number, ...).

⑨ **Work area**     Dialog with WIS is made here (e.g. input, selection, display, inquiry, ...).

ⓘ The operating elements, dependent on the mask, are available in the work area, 📖 see section "2.4 Operating elements".

⑩ **Function bar**     Depending on the work area this contains:
- Function keys, 📖 see section "2.2 Keyboard operation".
- Document/Level display, 📖 see section "6.2 Display Document".

### 2.3.1 Windows task bar

Usually the "Windows task bar" is located near the lower edge of the screen. You can use the "Windows task bar" to check the programs you have started. Select a program icon from the "Windows task bar" to make that program the active one.


GES3D018
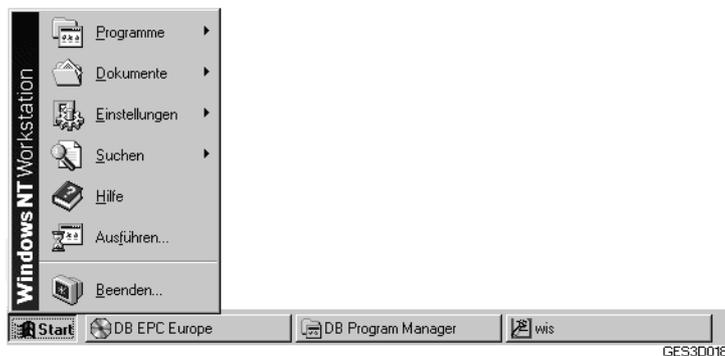
ⓘ If the "Windows task bar" is not displayed (e.g. WIS in foreground), you can use the key combination ⌨Ctrl + **Esc** or the **Windows key** (if available on your keyboard) to display it.

The "Windows task bar" may be missing in **preconfigured systems**. In this case, you have to use the key combination ⌨Alt + ⌨⇥ (Tab) to switch to another program. 📖 see section "2.3.2 Switching to another program".

### 2.3.2 Switching to another program

You can switch to another active program without having to interrupt your activities in the original program.

To switch to another program,
- use the key combination ⌨Alt + ⌨⇥ (Tab), or
- select the active program icon from the "Windows task bar".

ⓘ When you switch between programs, the programs remain active. The screen settings and selections are retained.

## 2.4 Operating elements

Use of the operating elements is basically identical for all masks.

In the following you will find detailed description of the operating elements according to:
- Features
- Use of the mouse and keyboard operation
- Where necessary notes, important additional information

### 2.4.1 Selection frame

The selection frame represents the most important tool for keyboard operation. Its position shows the area in which a selection, input or action can be executed.

**The selection frame can be positioned around:**
- Menus (general selection ①) 📖 see section "2.4.2 Selection list".
- Within a menu around a subordinate element (detailed selection ②).
- Input boxes 📖 see section "2.4.3 Input box".
- Action buttons 📖 see section "2.4.8 Action button"
- Figures in the document.
- References in the document 📖 see section "2.4.11 Reference".

Basically a differentiation is made between:
- **General selection** ①
  This is used for selecting an area (menu, input boxes, action buttons) in which a detailed selection can be made.
- **Detailed selection** ②
  A subordinate element can be selected within a general selection.
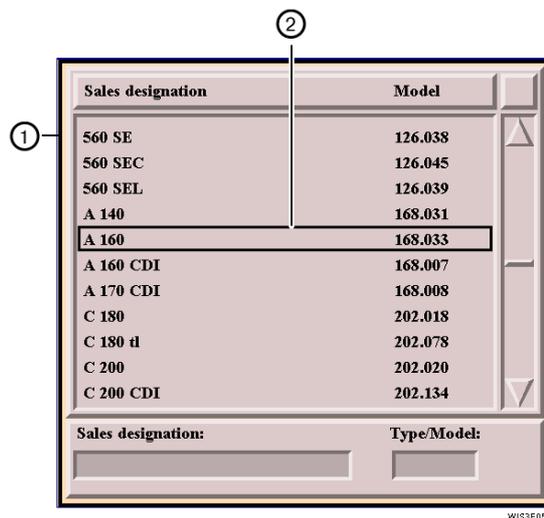


- Select the entry desired.
  ⇒ Selection (detailed selection ) is executed.

- Position the general selection frame around the desired area.
- Position the detailed selection frame around a subordinate element.
- Acknowledgement.
  ⇒ Element is selected or action started.

## 2.4.2 Selection list

Offers one or several selection options for a higher-ranking term. Single or multiple selection is possible depending on the function.

The following types of selection lists are possible:
- Tabular selection list
- Hash selection list
- Square selection list
- Document selection list

## 2.4.2.1 Tabular selection list

The list consists of the following elements:
- **Heading** ①
  Contains data (column titles) referring to the contents of the list.
- **List entry** ②
  Element within a selection list.
- **Selection bar** ③
  The selection bar displays the list entries which are selected.



| Sales designation | Model |
|---|---|
| E 200 | 210.035 |
| E 200 CDI | 210.007 |
| E 200 DIESEL | 210.003 |
| E 200 KOMPRESSOR | 210.045 |
| E 200 KOMPRESSOR tl | 210.245 |
| E 200 tl | 210.235 |
| E 220 CDI | 210.006 |
| E 220 CDI fg.lg | 210.606 |
| E 220 CDI tl | 210.206 |
| E 220 DIESEL | 210.004 |
| E 230 | 210.037 |

| Sales designation: | Type/Model: |
|---|---|
| E 220 CDI | 210.006 |

WIS3E052

- Select list entry.
  ⇒ List entry is activated or deactivated (selection bar is positioned around the list entry).
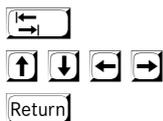
- Position the general selection frame around the table selection list
- Position detailed selection frame around list entry.
- Acknowledgement.
  ⇒ List entry is activated or deactivated (selection bar is positioned around the list entry).

## 2.4.2.2    Hash selection list

The hash is always is always connected to a selection term. Only a single selection is possible, i.e. only one hash may be active.

A differentiation is made between
- **activated hash** ① (black hash with check mark)
- **deactivated hash** ② (grey hash without check mark)

ℹ️    An activated hash is deactivated by the selection of another hash.



- Select hash.
  ⇒ Hash is activated.

- Position general selection frame around the hash selection list.
- Position detailed selection frame around the hash.
- Acknowledgement.
  ⇒ Hash is activated.

## 2.4.2.3    Square selection list

The square is always connected to a selection term. Multiple selections are possible, i.e. several squares can be active at the same time.

A differentitation is made between
- **activated square** ① (black square with check mark)
- **deactivated square** ② (grey sqaure without check mark)
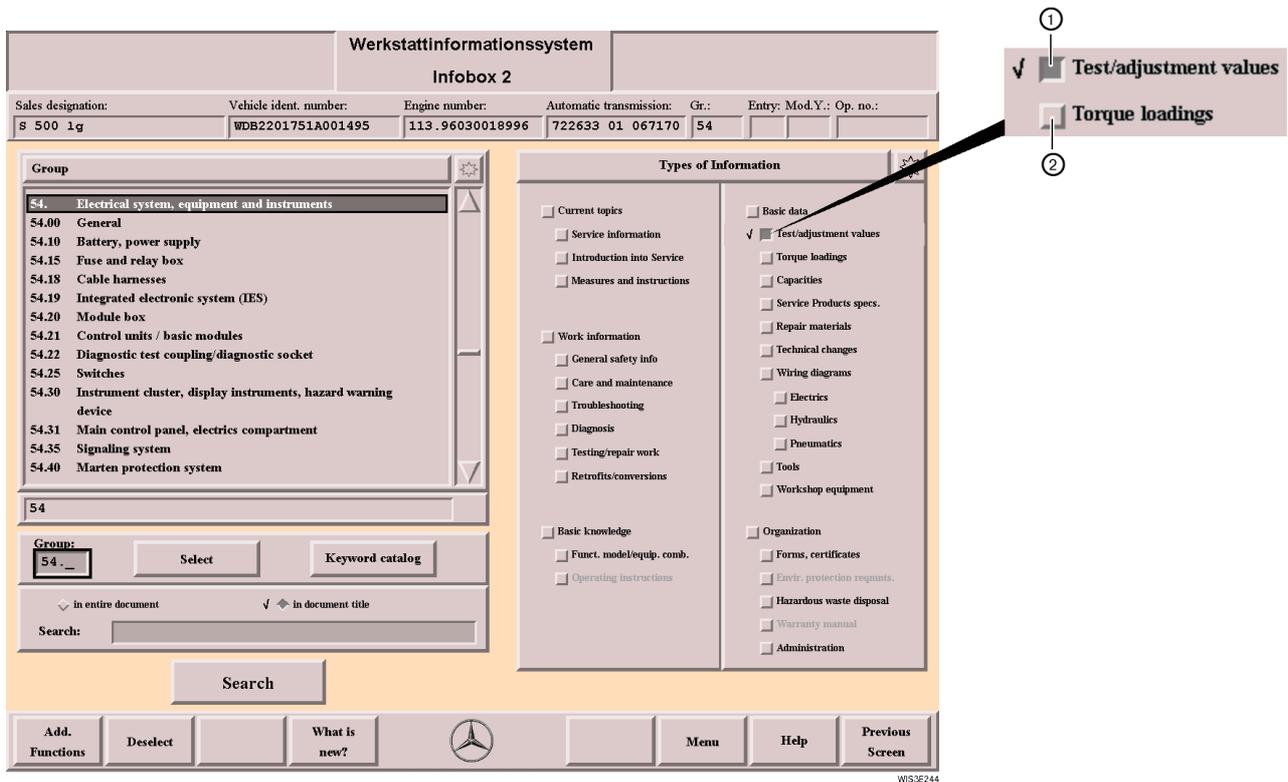


- Select square.
  ⇒ Square is activated or deactivated.

- Position general selection frame around the square selection list.
- Position detailed selection frame around the square.
- Acknowledgement.
  ⇒ Square is activated or deactivated.

## 2.4.2.4     Document selection list

In the document selection list, the document headings of documents found are listed as a result of the document search. The documents are displayed by selecting one or several document headings and the "Display" action button.



- Select the desired document title (several document titles can be selected).

  or
- Select the "sun" (all documents are selected)
- Select "Display" action button.
  - ⇒ Display of the document(s).
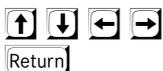
- Position the selection frame around the desired document title.
- Selection of a document title is executed. If needed, several document titles can be selected in the same way.
- Or select the "sun" (all documents are selected).
- The selection frame is positioned around the "Display" action button.
- Acknowledgement.
  - ⇒ Display of the document(s).

For further information on the document selection 📖 see section .

## 2.4.3    Input box

For entering data or displaying information. The input must be concluded with the Return key.



| | • | Select input box. |
| | • | Enter data. |

| | • | Position the general selection frame around the area desired. |
| | • | Position the detailed selection frame around the input box. |
| | • | Enter data. |
| Return | • | Acknowledgement. |

| | • | Deletes the last character (for correction). |
| Del | • | Deletes all entries in the input box selected. |
| F2 | • | Deletes the entries in all the input and information boxes in this mask. |
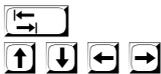
## 2.4.4    Information box

Displays the information selected by the user (vehicle-specific, information-specific).

ⓘ    Inputs are not possible.

## 2.4.5        Menu

The "Menu" consists of the following elements:

- Menu arrow ①
- Menu entry ②
- Scroll bar ③

When the menu arrow is selected, the menu is pulled down and the individual menu entries are displayed. You can page within the menu using the scroll bar.
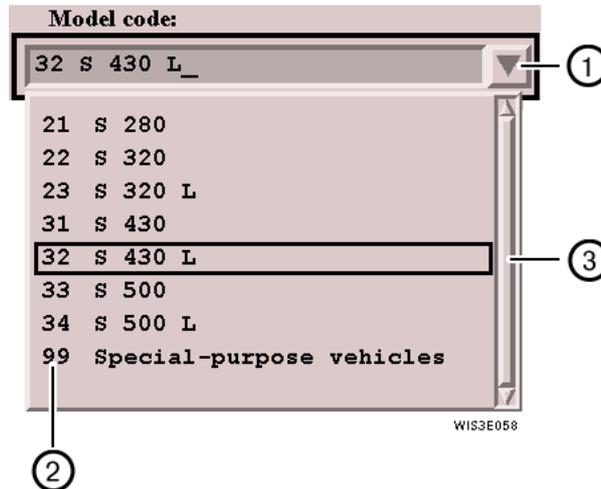


- Select menu arrow.
  ⇒ The menu is displayed for selecting a menu entry.
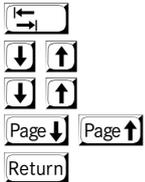
- Position the selection frame around the menu.
- The menu is opened.
- Pages line by line within the menu.
- Pages window by window within the menu.
- Acknowledgement
  ⇒ The menu entry is selected.

### 2.4.6        Sun

Used for complete activation/deactivation of the list entries in the selection lists.
The sun only occurs in selection lists.
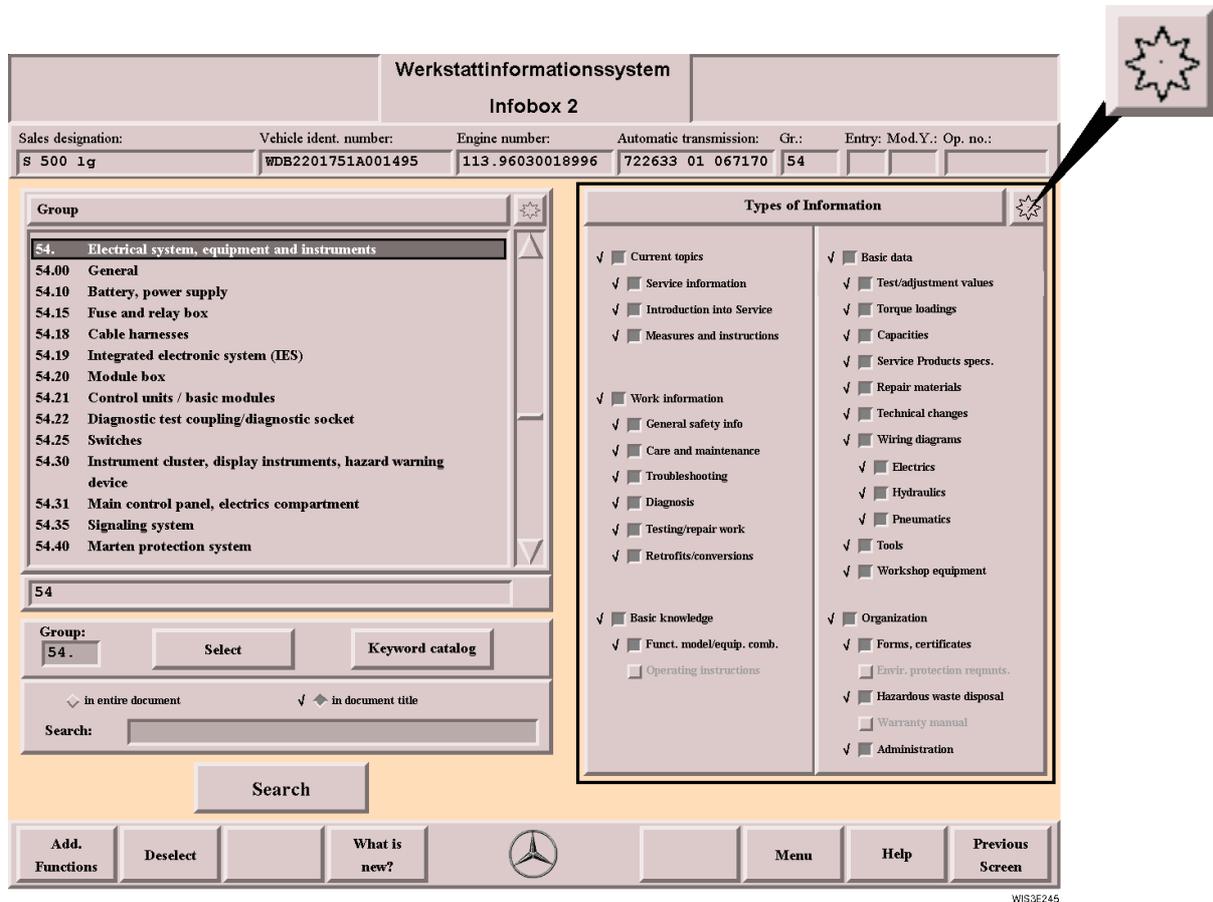


- Select the sun.
    ⇒  All lists entries are completely activated/deactivated.

- Position the selection frame around the selection list.
- Acknowledgement.
    ⇒  All the list entries are completely activated/deactivated.

## 2.4.7    Scroll bar

Used for paging with the **mouse** in selection lists or documents. The scroll bar looks the same in all WIS masks. It may by displayed vertically or horizontally.



| Sales designation | Model |
|---|---|
| E 200 | 210.035 |
| E 200 CDI | 210.007 |
| E 200 DIESEL | 210.003 |
| E 200 KOMPRESSOR | 210.045 |
| E 200 KOMPRESSOR tl | 210.245 |
| E 200 tl | 210.235 |
| E 220 CDI | 210.006 |
| E 220 CDI fg.lg | 210.606 |
| E 220 CDI tl | 210.206 |
| E 220 DIESEL | 210.004 |
| E 230 | 210.037 |

| Sales designation: | Type/Model: |
|---|---|
| E 220 CDI | 210.006 |

WIS3E060
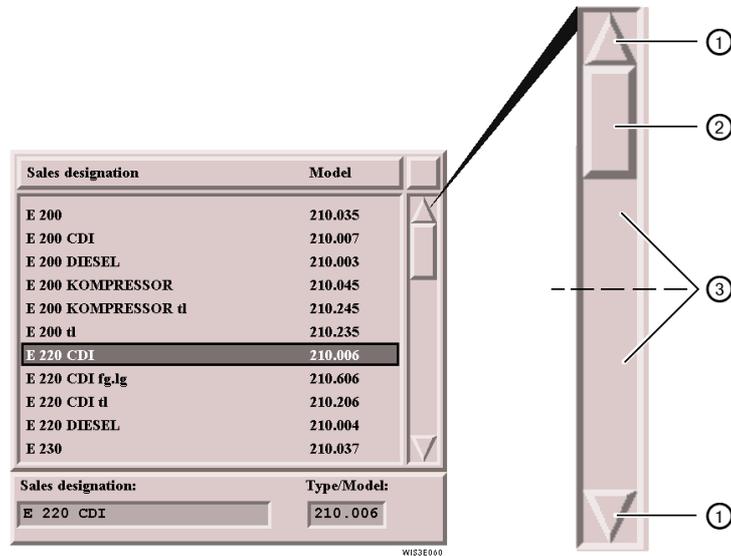
① **Scroll arrow**      The picture can be moved **line by line** in the direction desired using the scroll arrows pointing up and down or left and right.

② **Scroll bar**      The scroll bar gives information on
  • the relationship between the information currently visible and all the information within this window.
  • the current position in the document or in the selection list.

③ **Upper/lower half**   By selecting the respective half, the window is moved page by page/window by window in the corresponding direction.

**Paging line by line**
  • Select the corresponding scroll arrow.
    ⇒ The selection frame or document contents are moved line by line in the desired direction.
**Paging page by page/window by window**
  • Click either the upper or lower half of the scroll bar.
    ⇒ Pages up or down screen by screen/window by window.
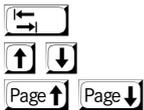
  • If necessary position the selection frame.
  • The selection frame or the document contents are moved in the direction desired line by line.
  • Pages up or down screen by screen/window by window.

## 2.4.8        Action button

The action button starts an action e.g. change to another mask, call of a submenu, ...



- Select the action button.
  ⇒ Action is started.

- Position the selection frame around the action button.
- Position the selection frame without the submenu.
- Acknowledgement.
  ⇒ Action is started.

### 2.4.9 Function button

The function button starts a function or calls an submenu. Function buttons are only found in the function bar. Different functions are offered depending on the mask.
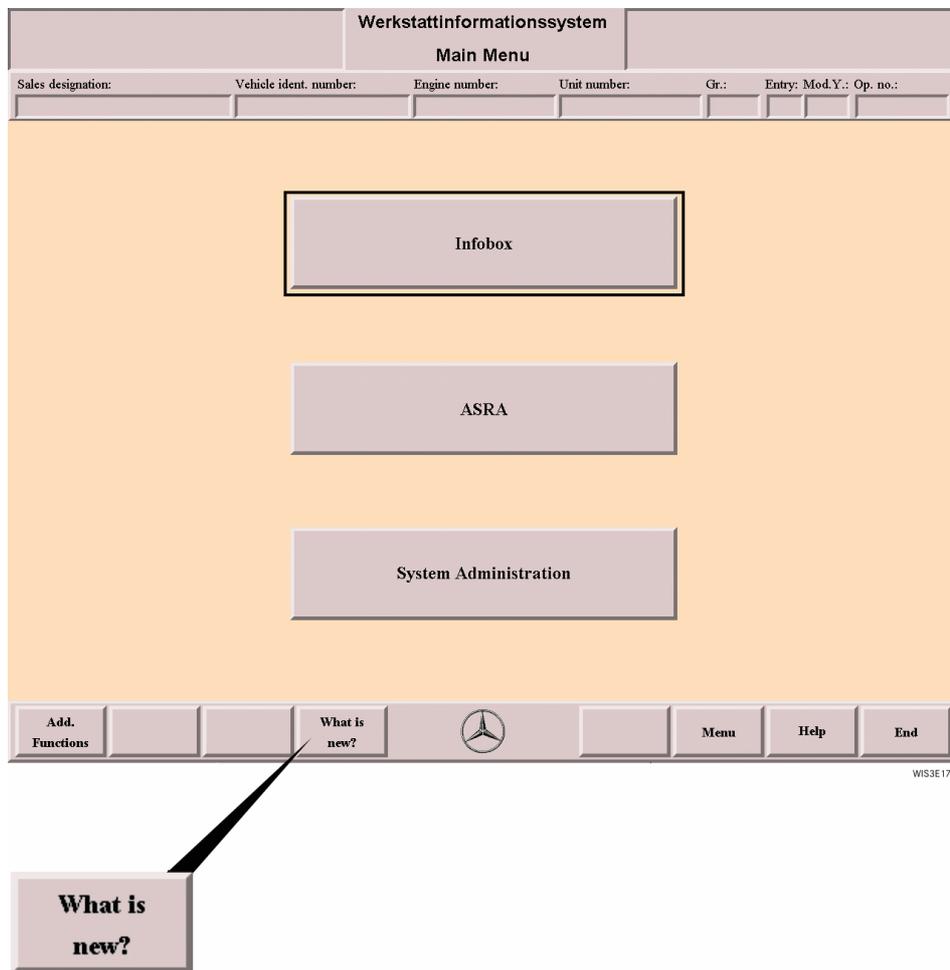


- Select the function button.
  ⇒ The function is started or a submenu is opened.

F1 to F8
- Press the function button.
  ⇒ The function is started or a submenu is opened.

For more information on submenus 📖 see section "2.5 Submenus".

## 2.4.10     Search arrow

Causes a search and display of one or several search terms in selection lists, circuit diagrams, ....
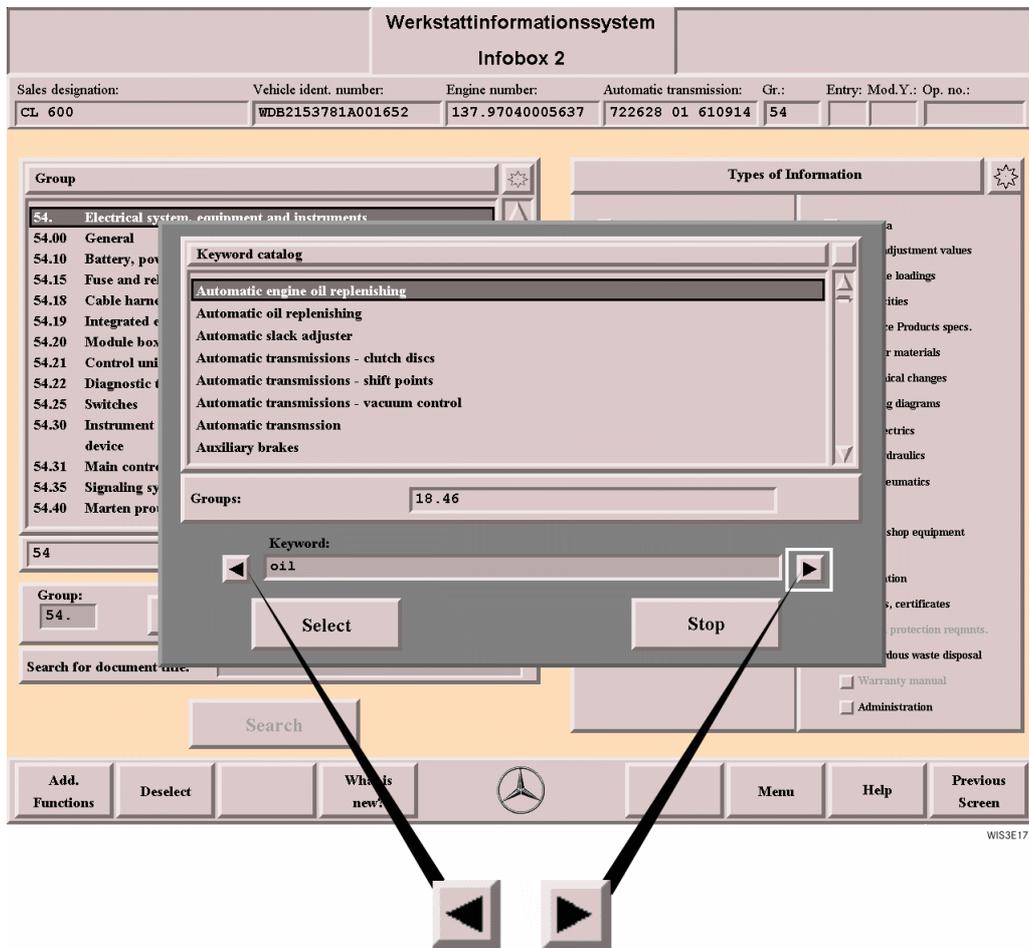


- Select input box.
- Enter search term in input box.
- Select appropriate search arrow.
    ⇒ Search/action is executed and can be repeated several times.

- Position search frame around input box.
- Enter search term.
- Position selection frame around appropriate search arrow.
- Acknowledgement.
    ⇒ Search/action is executed and can be repeated several times.

## 2.4.11     Reference

A reference consists of a sensitive area with display of the reference address. After selecting the reference address, the corresponding reference information is displayed.

A differentiation is made between:

- **External reference**
  Reference to another document.
- **Internal reference**
  Reference to information within the document displayed.

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**Werkstattinformationssystem**
**Display Document**

| Sales designation: | Vehicle ident. number: | Engine number: | Automatic transmission: | Gr.: | Entry: Mod.Y.: Op. no.: |
|---|---|---|---|---|---|
| CL 600 | WDB2153781A001652 | 137.97040005637 | 722628 01 610914 | 01 | |

| AR01.00-P-1200L | | Test compression pressure | Full-size view | Validity OFF | Page: | 3/ 4 |

| | | | |
|---|---|---|---|
| ⟦ ⟧ ⟦ ⟧ | **Removal, installation** | | |
| 1 | Bring engine to operating temperature (approx. 80 °C ) | ⓘ Test compression pressure only when engine is at normal operating temperature. | |
| 2 | Remove air cleaner | | AR09.10-P-1050L |
| 3 | Remove spark plugs | ⓘ One spark plug for each cylinder. | AP15.10-P-1580L |
| 4 | Crank engine with starter | ⓘ Do not crank engine at steering lock but use contact switch of the compression recorder. ⓘ Crank engine several times with the starter in order to eliminate combustion residues in the cylinder. | AR01.10-P-0110V ──① |
| ◁ | **Inspecting** | | |
| 5 | Insert compression recorder into spark plug hole | 🗒 | 001589762100 ──② |
| 6 | Open throttle flap | | |
| 7 | Crank engine with starter | ⓘ Do not crank engine at steering lock but use contact switch of the compression recorder. ⓘ Crank engine at least 8 revolutions in order to test compression pressure. | AR01.10-P-0110V |
| 8 | Repeat test procedure at the remaining cylinders in the same way | | |
| 9 | Compare measurments obtained with the specified pressures | ⓘ If the pressure is below the minimum compression pressure or if the permissible | |

| Add. Functions | Document Functions | | What is new? | Document: 1 / 1 | Level: 1 | Menu | Help | Previous Screen |

WIS3E174

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| ① | **External reference** | The external reference is marked by a **red border with display of the reference address**. After selection of the reference, the relevant document is displayed. |
| ② | **Internal reference** | The internal reference is marked by **black underlining with display of the reference address**. After selection, a jump is made within the document, e.g. to torque loadings tables, commercial tools, special tools, ... |

- Select the reference (reference address).
  ⇒ The reference information is displayed.
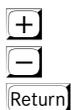
- Moves the selection frame down to the next reference or to the next picture.
- Moves the selection frame up to the previous reference or to the previous picture.
- Acknowledgement.
  ⇒ The reference information is displayed.

[+]
[−]
[Return]

## 2.5        Submenus

Some functions call submenus which contain more functions. The submenu is positioned over a part of the work area. The visible part of the work area under the submenu cannot be edited as long as the submenu is open.



WIS3E258
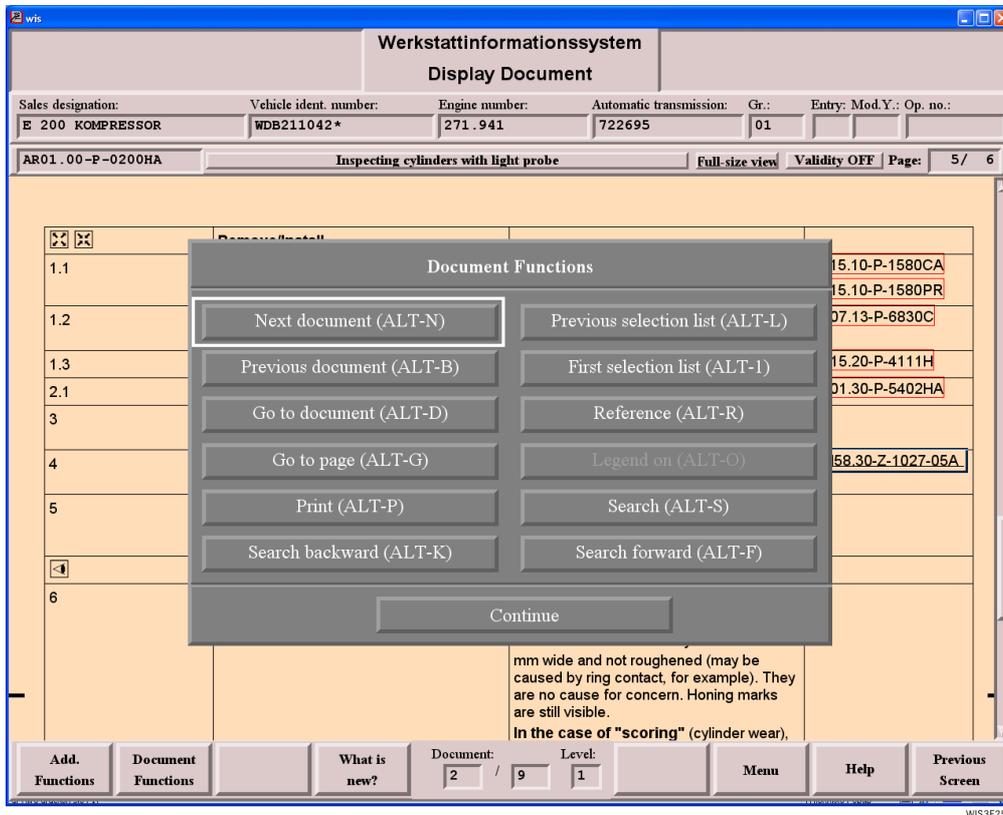
| | |
|---|---|
| **Submenu** | A submenu can contain action buttons, selection lists and other operating elements. |
| **Submenu title** | Corresponds to the title of the function button. |
| **Continue** | Closes the submenu. |

## 2.6　　　Pop-up menus

Some actions may cause pop-up menus to be called. Usually these are system messages which also have to be acknowledged. The pop-up menu is positioned over a part of the work area. The visible part of the work area under the pop-up menu cannot be edited as long as the pop-up menu is open.



WIS3E250
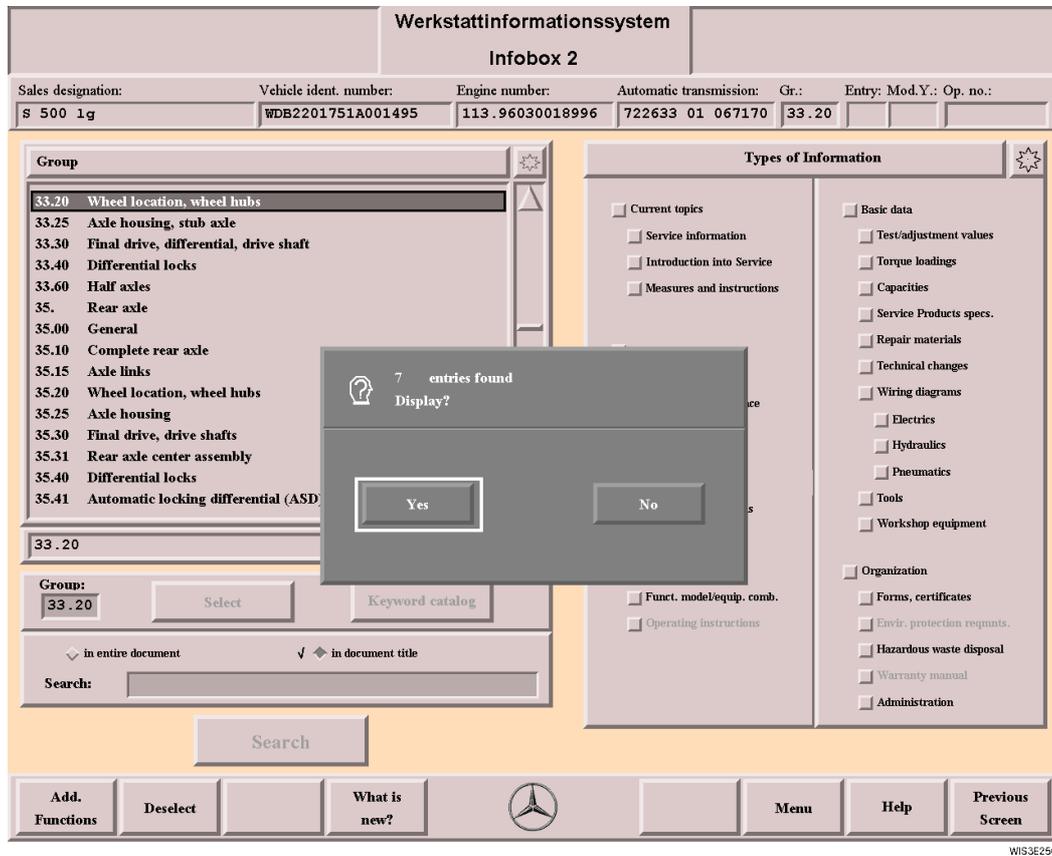
**Pop-up menu**　　　　　　Pop-up menus contain information on why the call was called and, if applicable, choices available which have to be acknowledged accordingly by selection.

## 2.7 Help

"Help" offers explanations on every topic in WIS. After "Help" is called, an explanation is offered depending on where the user happens to be in WIS. The topic contents of "Help" correspond to the WIS/ASRA user documentation. "Help" can be called from any mask in WIS.

**Help**

WIS0E143
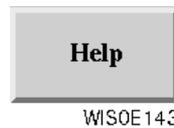
**Help function button**       Calls the topic-related help. Help can also be called using the F7 function key.

## 2.7.1 Display Help

Help consists of the entire user documentation and is integrated in WIS in PDF format. The Help text that is opened is generally displayed for the current mask. You can select any Help topic by using the navigation bar ④.

If you wish to view a specific topic, you can use the "Index" in the navigation bar or the "Search" ⑤ symbol. The Help mask can be printed out in part or in full as necessary.

ⓘ       AcrobatReader 5.1 or 5.0 is required to display Help.
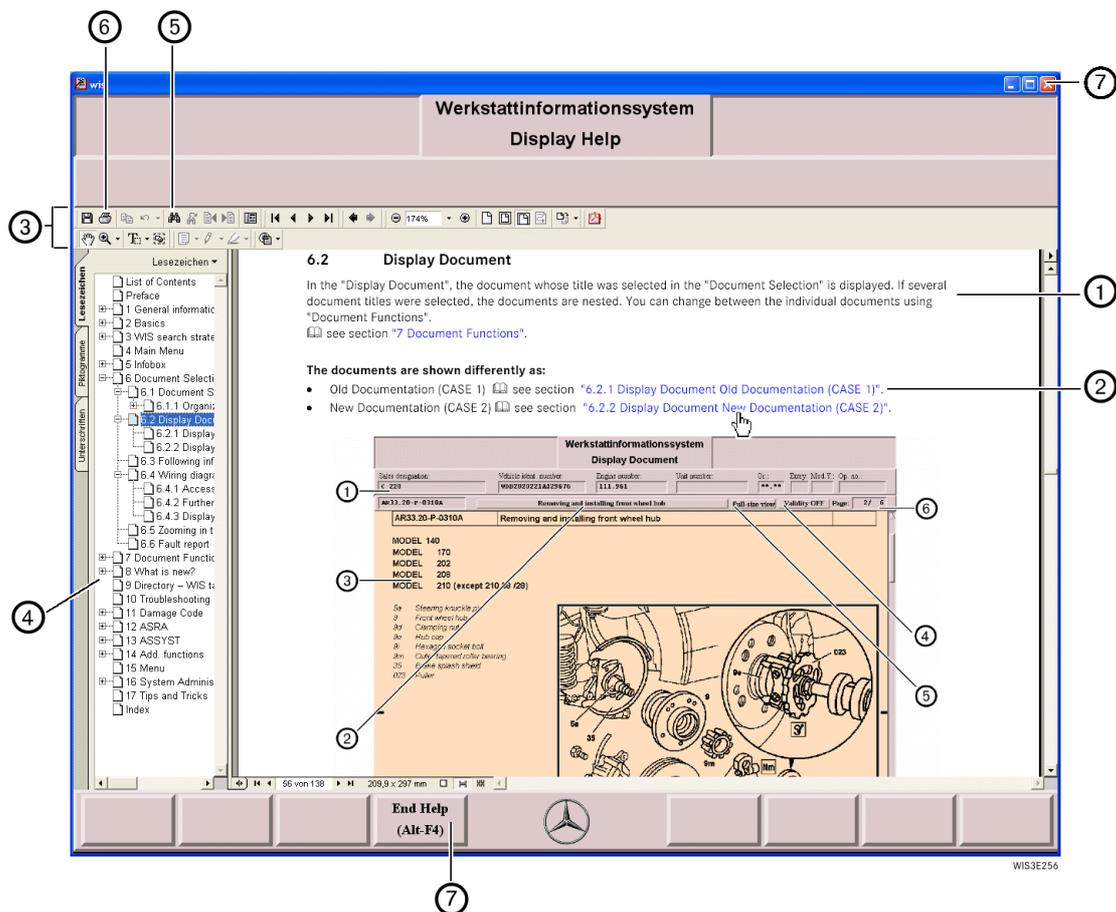
① **Help text**     When Help is opened, initially detailed information about the current mask is displayed. However, links or the navigation bar can be used to move on to other information.

② **Link**     The Help topics are linked. Links are indicated by blue lettering. Selecting a link allows detailed information to be displayed.

③ **Symbol bar**     You can navigate Help using the symbol bar. If you position the mouse pointer on one of the symbols, a tool tip describing the function of the symbol is displayed.

④ **Navigation bar**     The navigation bar contains all the Help chapters relevant to WIS/ASRA. A chapter may contain various subheadings. These subheadings can be displayed by selecting the Plus symbol.

⑤ **Search**     Select the "Search" symbol to open Acrobat Search. This then enables you to perform a full-text search of all Help texts.

⑥ **Print Help**     Select the "Print" symbol to open the Print option window. You can now print out either individual Help pages or the entire user documentation.
📖 see section "7.3.1 Print option window".

⑦ **End Help**
Alt + F4     Ends "Help".

# 3        WIS search strategies

Depending on the data available for the document search, the WIS user has various options of carrying this out:

📖 see section "3.1 Document search using Infobox 1 and Infobox 2 (default search)".

📖 see section "3.2.1 Document search using the operation number"

📖 see section "3.2.2 Document search using the document number"

📖 see section "3.2.3 Document search using the Directory"

📖 see section "3.2.4 Document search using Troubleshooting Symptoms"

📖 see section "3.3 Document search using ASRA"

## 3.1        Document search using Infobox 1 and Infobox 2 (default search)

The basic rule is: the more qualified the selection made in "Infobox 1" and "Infobox 2", the more accurate the document selection made by the system. To achieve the best search result, the entries in the "Model", "Engine" and "Unit" selection lists must be combined by selection. If possible, the function group or function subgroup assigned to the topic being looked for (using the keyword catalog) and the type of information must be selected exactly.

ℹ️  If the search result is negative, the search should be extended to more function groups and if necessary more types of information.

| | Action | Where | Tip |
|---|---|---|---|
| **1.** | • Input or selection of the vehi-cle ident. number<br><br>**or**<br><br>• Input or selection of Model, Engine, Unit (3-6 digits). | Infobox 1 | • Acknowledge the input of the vehicle ident. number with Return.<br>• Use the History function.<br>If you select the menu arrow, a menu is opened in which the last 30 entries are highlighted for selection.<br><br>• To achieve the best search result, the entries in the "Model", "Engine" and "Unit" selection lists must be combined by **selection**. |
| **2.** | Select the "Documentation" action button. | Infobox 1 | The search criteria selected are displayed in the header area 📖 see section "2.4.4 Information box". |
| **3.** | • Input or selection of the function group(s)/function sub-group(s).<br><br>• Input search terms as required for search "in entire document" or for search "in document title".<br><br>• Select the type(s) of information. | Infobox 2 | • Use the keyword catalog 📖 see section "5.2.1 Keyword catalog".<br>• If the document search using the function subgroup does not lead to the desired result, the function group assigned to the function subgroup should be selected and the search procedure repeated.<br><br>• The document selection list is restricted to the documents in which the search term occurs in the entire document or in the document title.<br><br>• The search criteria selected are displayed in the header area 📖 see section "2.4.4 Information box". |
| **4.** | Select the "Search" action button. | Infobox 2 | |
| **5.** | The document titles are listed. | Document selection list | Note the validity and modification information. 📖 see section "6 Document Selection/Display". |
| **6.** | Select the desired document title(s). | Document selection list | |
| **7.** | Select the "Display" action button. | Document selection list | |
| **8.** | Document is displayed. | Document display | • The document display can be shown as "Full-size view" or "Standard view".<br>• The document validity can be shown/hidden for the current document with "Validity ON" or "Validity OFF". 📖 see section "6.2 Display Document". |

## 3.2        Document search using Infobox 1

As an alternative, the document search can be started using the following in "Infobox 1":

- Symptom-based trouble shooting,
- an Operation number
- a Document number
- a Directory or
- What is new?

ⓘ The search using the "Directory" or the "Document number" is made without taking the vehicle-specifc criteria selected in "Infobox 1" into consideration.
For the document search using the "Troubleshooting Symptoms" and "Operation no." the vehicle context selection must have been made beforehand.
The search using "What is new?" can be made with or without vehicle context.

```
┌──────────────────────────────────────────────────────────────────────┐
│                              Main Menu                                 │
│                                 │                                      │
│                              Infobox                                   │
│                                 │                                      │
│                              Infobox 1                                 │
│          ┌──────────────────────┼──────────────────────────┐          │
│   Selection/Input        Selection/Input              without         │
│   Vehicle ident.         Model, Engine, Unit (3-6      vehicle         │
│   number                 digits)                       context        │
│                          ⓘ Combine the respective                     │
│                            entries in the selection                    │
│                            lists                                       │
│                                                                        │
│   Trouleshooting   Input of Op. No.   What is new?                     │
│   Symptoms                                                             │
│                                                                        │
│   Selection of error                                                   │
│   symptoms in the        What is new?   Directory   Input of Document  │
│   symptom selection                                  no.               │
│   list                                                                 │
│                                                                        │
│   Search                 Changes/New    Types of information           │
│                          Top News       Further selection depending    │
│                          STI            on the type of information     │
│                          ASRA           selected                       │
│                                                                        │
│              Document display or document selection list               │
└──────────────────────────────────────────────────────────────────────┘
```

### 3.2.1 Document search using the operation number

The document search together with an operation number is possible if the following search criteria is known:

- Vehicle ident. number of the vehicle or
- Model (3-6 digits) of the vehicle or unit,
- corresponding operation number.

| | Action | Where | Tip |
|---|---|---|---|
| **1.** | • Input or selection of the vehicle ident. number<br><br>**or**<br><br>• Input or selection of Model, Engine, Unit (3-6 digits). | Infobox 1 | • Acknowledge the input of the vehicle ident. number with Return.<br>• Use the History function.<br>If you select the menu arrow, a menu is opened in which the last 30 entries are highlighted for selection.<br><br>• To achieve the best search result, the entries in the "Model", "Engine" and "Unit" selection lists must be combined by **selection**. |
| **2.** | Input of the operation number. | Infobox 1, in the "Op.No." input box | |
| **3.** | Select the "Documentation" action button. | Infobox 1 | The search criteria selected are displayed in the header area<br>📖 see section "2.4.4 Information box". |
| **4.** | Document titles are listed. | Document selection list | Note the validity and modification information.<br>📖 see section "6 Document Selection/Display". |
| **5.** | Select the document title(s) desired. | Document selection list | |
| **6.** | Select the "Display" action button. | Document selection list | |
| **7.** | Document is displayed. | Document display | • The document display can be shown as "Full-size view" or "Standard view".<br>• The document validity can be shown/hidden for the current document with "Validity ON" or "Validity OFF".<br>📖 see section "6.2 Display Document". |

### 3.2.2      Document search using the document number

Input of a document number in Infobox 1 is a fast access variant to documents whose complete document number or part of it is known.

|     | Action | Where | Tip |
| --- | --- | --- | --- |
| **1.** | Input of the document number (complete or with place holder). | Infobox 1, "Document no." input box | • Search criteria already made in "Infobox 1" are not taken into consideration.<br>• Enter document number.<br>Example: *ar3320p0310a* (the input can be made with or without dot and hyphen).<br>• The percentage character (%) stands for any character sequence. Example: *ar3320%* |
| **2.** | Press the Return key. | Keyboard | |
| **3.** | The document titles are listed. | Document selection list | Note the validity and modification information.<br> see section "6 Document Selection/Display". |
| **4.** | Select the desired document title(s). | Document selection list | |
| **5.** | Select the "Display" action button. | Document selection list | |

### 3.2.3      Document search using the Directory

The "Directory" is an alternative option and offers a document search **without** having to select search criteria in "Infobox 1". The user is guided step by step to the information he requires.

|     | Action | Where | Tip |
| --- | --- | --- | --- |
| **1.** | Select the "Directory" action button. | Infobox 1 | Selection criteria already made in "Infobox 1" is **not** taken into consideration. |
| **2.** | Select the reference address of the type of information desired. | Directory | |
| **3.** | The user is guided step by step to the information desired depending on the type of information selected. | | |

### 3.2.4        Document search using Troubleshooting Symptoms

This document search enables fast and direct diagnosis of complaints. Depending on the symptoms an error occurs with, a direct search can be made for information which is assigned to the **Troubleshooting (AF)** information type. Only topics on the fault symptoms selected are offered as result.

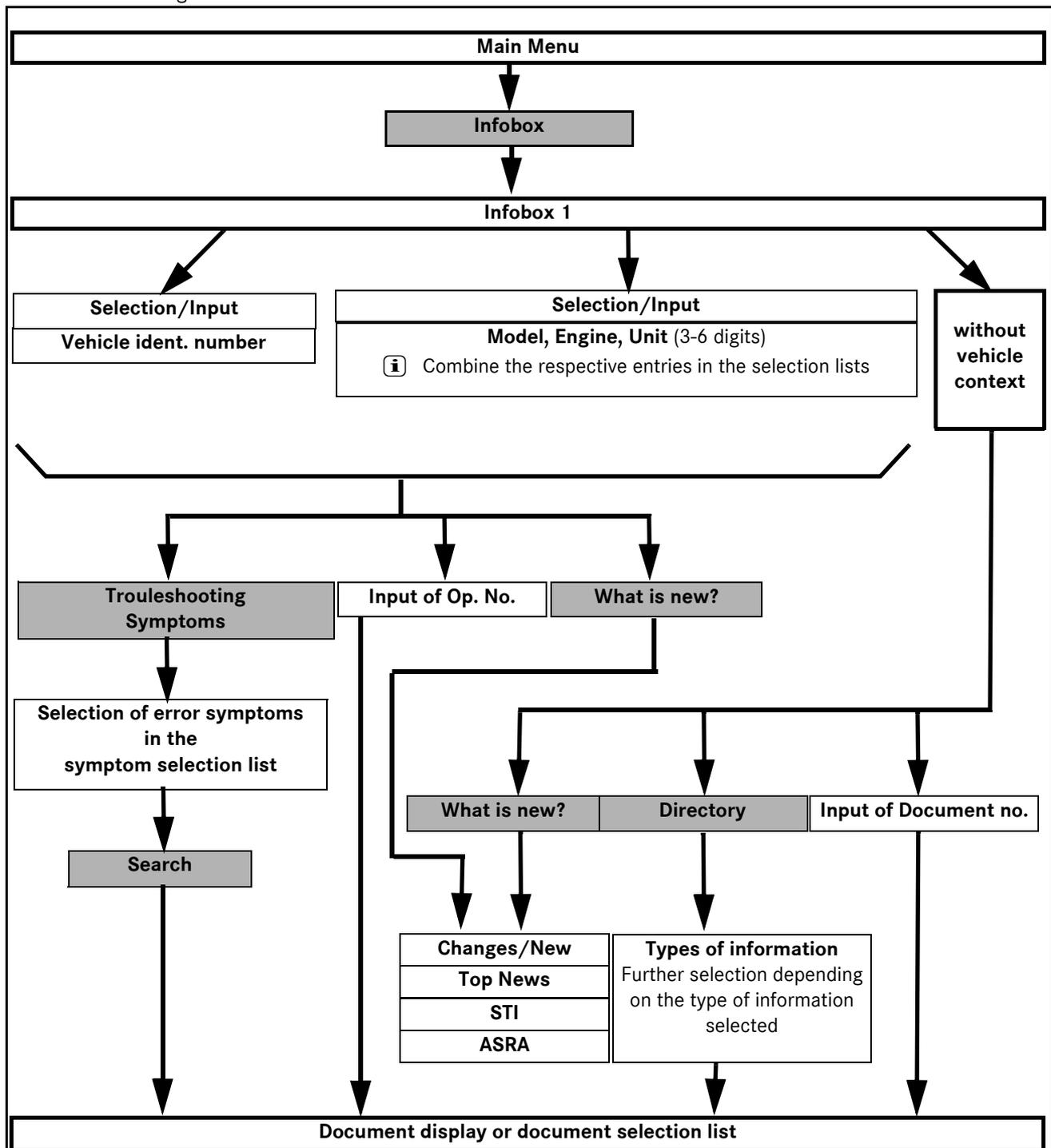|  | **Action** | **Where** | **Tip** |
|---|---|---|---|
| **1.** | • Input or selection of the vehi-cle ident. number<br><br>**or**<br><br>• Input or selection of Model, Engine, Unit (3-6 digits). | Infobox 1 | • Acknowledge the input of the vehicle ident. number with ⌜Return⌝.<br>• Use the History function.<br>If you select the menu arrow, a menu is opened in which the last 30 entries are highlighted for selection.<br>• To achieve the best search result, the entries in the "Model", "Engine" and "Unit" selection lists must be combined by **selection**. |
| **2.** | Select the "Troubleshooting Symptoms" action button. | Infobox 1 | |
| **3.** | Select the corresponding symptoms in the table. | Troubleshooting Symptoms | Select at least one entry per column.<br>&#128214; see section "10 Troubleshooting Symptoms": |
| **4.** | Select the "Search" action button | Troubleshooting Symptoms | The search is made using **all** function groups. |
| **5.** | The document titles are listed. | Document selection list | • Note the validity and modification information.<br>&#128214; see section "6 Document Selection/Display".<br>• If the "Search" does not lead to the desired result, select the entry "all criteria affected" in the third column (dependent upon ...)  in the Troubleshooting Symptoms selection list and repeat the "Search".<br>You may have to repeat the process in the 2nd and 1st column. |
| **6.** | Select the desired document title(s). | Document selection list | |
| **7.** | Select the "Display" action button. | Document selection list | |
| **8.** | Document is displayed. | Document display | • The document display can be shown as "Full-size view" or "Standard view".<br>• The document validity can be shown/hidden for the current document with "Validity ON" or "Validity OFF".<br>&#128214; see section "6.2 Display Document". |

## 3.3        Document search using ASRA

This document search enables a operation item related document search from the ASRA function if the following search criteria are known:

- Vehicle ident. number or
- Range, family and model code
- Topic assignment in the design group directory and
- corresponding operation item.

```
┌─────────────────────────────────────────────────────────────────────────────┐
│                               Main Menu                                       │
└─────────────────────────────────────────────────────────────────────────────┘
                │                                              │
                ▼                                              ▼
        ┌──────────────┐                              ┌──────────────┐
        │   Infobox    │                              │    ASRA      │
        ├──────────────┤                              └──────────────┘
        │  Infobox 1   │                                     │
        │ Selection/Input of                                 │
        │ vehicle ident. number │                            │
        └──────────────┘                                     │
                │                                            │
                ▼                                            │
        ┌──────────────┐                                     │
        │    ASRA      │                                     │
        └──────────────┘                                     │
                │                                            │
                ▼                                            ▼
        ┌─────────────────────────────────────────────────────────┐
        │              ASRA Vehicle requirements                   │
        └─────────────────────────────────────────────────────────┘
                │                           │             │
                │                           ▼             ▼
                │              ┌──────────────┐  ┌──────────────┐
                │              │Selection/Input│  │Selection/Input│
                │              │Vehicle ident. │  │    Model     │
                │              │   number     │  │     or       │
                │              │              │  │ Range/Family/│
                │              │              │  │  Model code  │
                │              └──────────────┘  └──────────────┘
                │                      │                │
                ▼                      ▼                ▼
        ┌─────────────────────────────────────────────────────────┐
        │                 Selection/Input                          │
        │                  Design group                            │
        └─────────────────────────────────────────────────────────┘
                                │
                                ▼
        ┌─────────────────────────────────────────────────────────┐
        │            Selection of design group entry               │
        │              in the design group directory               │
        └─────────────────────────────────────────────────────────┘
                                │
                                ▼
                    ┌──────────────────────┐
                    │   Operation items    │
                    └──────────────────────┘
                                │
                                ▼
        ┌─────────────────────────────────────────────────────────┐
        │     Selection of opeation item in the operation item list │
        └─────────────────────────────────────────────────────────┘
                                │
                                ▼
                    ┌──────────────────────┐
                    │    Documentation     │
                    └──────────────────────┘
                                │
                                ▼
        ┌─────────────────────────────────────────────────────────┐
        │         Document display or document selection list      │
        │          (if no documentation found: Infobox 2)          │
        └─────────────────────────────────────────────────────────┘
```

|     | Action | Where | Tip |
|-----|--------|-------|-----|
| **1.** | Select the "ASRA" action button. | Main Menu | |
| **2.** | • Input or selection of the vehicle ident. no.<br>**or**<br>• Input or selection of<br>  — range code<br>  — family code<br>  — model code. | ASRA Vehicle requirements | • Acknowledge the input of the vehicle ident. number with Return.<br>  📖 see section "12.2 ASRA Vehicle requirements".<br>• Use the History function.<br>  If you select the menu arrow, a menu is opened in which the last 30 entries are highlighted for selection. |

**or**

|     | Action | Where | Tip |
|-----|--------|-------|-----|
| **1.** | Input or selection of the vehicle ident. number | Infobox 1 | |
| **2.** | Select the "ASRA" action button. | Infobox 1 | |
| **3.** | • Select the design group menu arrow, select the design group.<br>**or**<br>• Input of the design group number. | ASRA Vehicle requirements | |
| **4.** | • Selection/s of in the design group directory.<br>**or**<br>• Selection/s in the "Pictures" selection list, select the "Picture" action button and define using graphics display. | • ASRA Vehicle requirements or<br>• Picture mask | |
| **5.** | Select the "Operation items" action button. | • ASRA Vehicle requirements or<br>• Picture mask | |
| **6.** | Select the corresponding operation item. | Operation items | |
| **7.** | Select the "Documentation" action button. | Operation items | |
| **8.** | • Document titles are listed.<br><br><br>**or**<br>• "Infobox 2" is called if no documentation has been found in connection with the operation item. | Document selection list<br><br><br><br>Infobox 2 | • Note the validity and modification information.<br>  📖 see section "6 Document Selection/Display".<br>• Document titles which are connected directly with the operation number are listed at the beginning of the document selection.<br>• Select function group(s) or function subgroup and type of information and select the "Documentation" action button. 📖 see section "5.2 Infobox 2". |
| **9.** | Select the desired document title(s). | Document selection list | |
| **10.** | Select the "Display" action button. | Document selection list | |
| **11.** | Document is displayed. | Document display | • The document display can be shown as "Full-size view" or "Standard view".<br>• The document validity can be shown/hidden for the current document with "Validity ON" or "Validity OFF". 📖 see section "6.2 Display Document". |

## 4          Main Menu

The Main Menu contains action buttons which call the following functions:
- Infobox
- ASRA
- System Administration
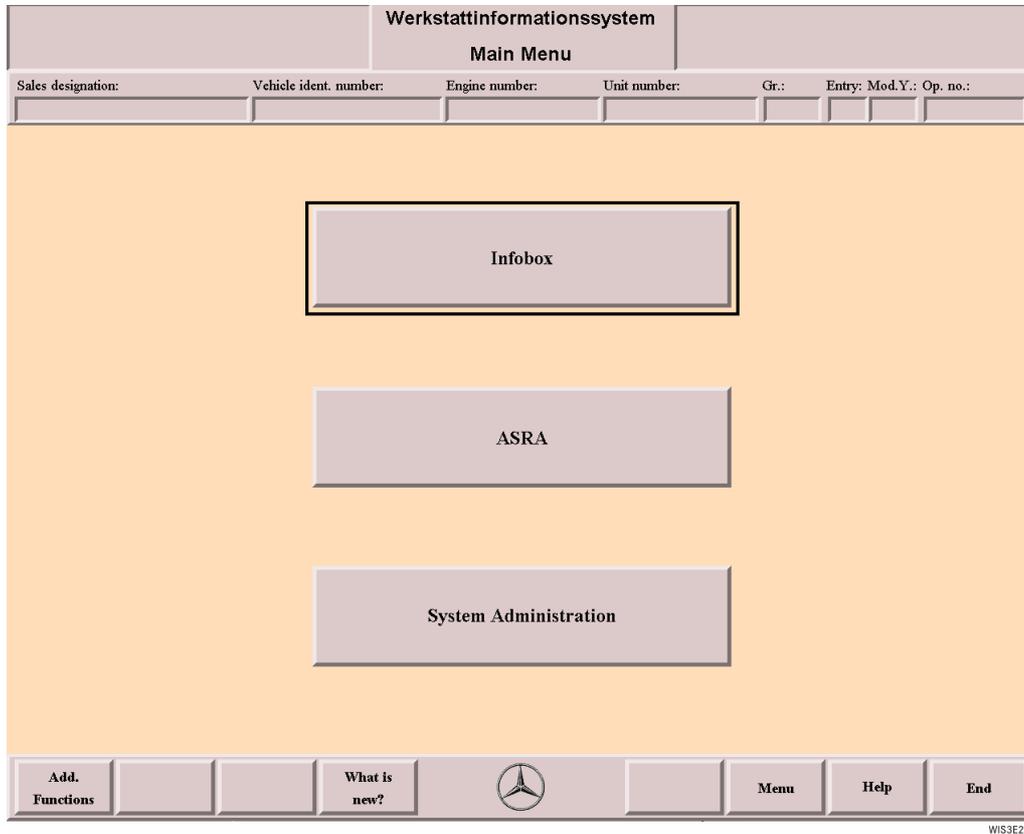


**Infobox**                    "Infobox 1" is called and enables the following information to be called:

- **Workshop documentation**
  Depending which data is available for the document search, there are various ways of carry-ing out the document search. 📖 see section "3 WIS search strategies".
- **Damage code** 📖 see section "11 Damage Code".
- **ASRA** (operation texts, standard texts, flat rates, work units) 📖 see section "12 ASRA".
- **ASSYST** 📖 see section "13 ASSYST".

**ASRA**                       The "ASRA Vehicle requirements" is called for defining the vehicle and design group for selecting the operation items. 📖 see section "12 ASRA".

**System**                     The "System Administration" is called and enables Workstation-specific settings.
**Administration**             📖 see section "16 System Administration".

# 5          Infobox

Using the selection criteria in the Infobox, you can "limit" the amount of information offered.

The Infobox is divided into

- Infobox 1 (vehicle-specific selection)
- Infobox 2 (information-specific selection)

## 5.1        Infobox 1

The documentation can be accessed within the Infobox in various ways.

Using the "ASRA" function, you can call the electronic work units/flat rates catalog and, using the "Damage Code" function, carry out a damage code definition for the warranty and expense down to the organization.

- **Documentation**
    - **Default documentation search**
        ⇒ By selecting or entering **vehicle-specific** criteria, the information available with regard to the documentation is preselected.
        The preselection can be general (only model, at least 3 digits with automatic type recognition) or more exact (all information or input of the vehicle ident. number).
        A further restriction is possible using the input boxes, Country, Mod. Y and SA code.
        The documentation search can also be made by just using an engine or unit, that is independent of the model of the vehicle. 📖 see section "3.1 Document search using Infobox 1 and Infobox 2 (default search)".

    - **Alternative documentation search**
        ⇒ **Input of an operation number**.
        ℹ️   Selection and search criteria can be combined.
        📖 see section "3.2.1 Document search using the operation number".
        ⇒ **Input of a document number** (in full or with wildcard).
        ℹ️   Selection criteria already made in "Infobox 1" is not taken into consideration during the document search using "Document No.".
        📖 see section "3.2.2 Document search using the document number".
        📖 see section "5.1.4 Document number".
        ⇒ **Directory action button**.
        ℹ️   Selection criteria aleady made in "Infobox 1" is not taken into consideration during the document search using "Directory".
        📖 see section "3.2.3 Document search using the Directory".
        📖 see section "9 Directory – WIS table of contents".
        ⇒ **Troubleshooting Symptoms action button**.
        📖 see section "3.2.4 Document search using Troubleshooting Symptoms".
        📖 see section "10 Troubleshooting Symptoms".

- **Damage code**

After selecting the "Damage code" action button, a damage code can be defined for warranty and expense down to the organization. 📖 see section "11 Damage Code".

- **ASRA**

After selecting the "ASRA" action button, the electronic work units/flat rates catalog is called. This enables fast and reliable inquiry about operation items, working hours and damage codes. 📖 see section "12 ASRA".

- **ASSYST**

After selecting the "ASSYST" action button, a service sheet can be generated dynamically for the scope of service to be carried out. 📖 see section "13 ASSYST".

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① **Vehicle type**      If you select the menu arrow, a menu is opened which lists the individual vehicle types. The documentation search is limited to the vehicle type selected. The vehicle type is set automatically by entering the model or vehicle ident. number.

         Car

         Cross-country vehicles

         Light transporters

         Heavy-duty transporters

         Truck

         Bus

         Unimog

         Smart

     ⓘ The displayed range of possible vehicle types depends on the license.

② **World Manufacturer Code**      The world manufacturer code can be defined as follows:

- By selecting the menu arrow, a menu is opened containing the individual world manufacturer codes (e.g. WDB, 4JG,...).
- By entering the world manufacturer code and type/model or vehicle ident. number in the ③ field, the world manufacturer code is entered automatically in field ②.

     ⓘ When you exit WIS, the last world manufacturer code setting is saved and displayed again automatically when WIS is restarted.

     📖 see section "5.1.1 Overview of World Manufacturer Codes".

| ③ | **Vehicle ident. number input box/ selection menu** | The following inputs are possible: |
|---|---|---|

**③** **Vehicle ident. number input box/ selection menu**

The following inputs are possible:

- Input of a vehicle ident. number (14 or 17 digit), a vehicle-specific document access is possible. The input must be concluded with ⌸Return⌸.
- Input of a type model (3 to 6 digits). The input must be concluded with ⌸Return⌸.
- Input of a type model (3 to 6 digits) in the Type/Model input box **⑧**. The entry is transferred automatically to the vehicle ident. number box **③**.
- **History function**
  If you select the arrow, a menu is opened in which the last 30 entries are highlighted for selection. These entries (type, model or vehicle ident. number) can also be accessed in the EPC using the ⌸F3⌸ function key.
  - ⓘ The world manufacturer code is also highlighted so that a differentiation can be made for the same type models with different world manufacturer code.

If a **non-European** vehicle ident. number is entered with ⌸Return⌸ this is converted to a European vehicle ident. number and the non-European vehicle ident. number is displayed in the vehicle ident. number information box **④**.

ⓘ If a vehicle ident. number is entered/selected, the pop-up menu "Display work instructions for special cases" is opened which has to be acknowledged accordingly.
📖 see section "5.1.3 Display work instructions for special cases?".

**④** **Vehicle ident. number information box**

Information box for **non-European** vehicle ident. number.

ⓘ Analogously, the corresponding **European** vehicle ident. number is displayed in the Vehicle ident. number input box **③**.

**⑤** **Op. No.**

Input of an operation number of the WU system (e.g. 002000) combined with the type or model or vehicle ident. number. Documents that are assigned to the work number are displayed directly in the "Document Selection" after selection of the "Documentation" action button.
📖 see section "3.2.1 Document search using the operation number".

ⓘ The vehicle context **must be** selected before entering the operation number.

**⑥** **Sales designation/ Model selection list**

For selecting a sales designation or the model.

ⓘ The entry is transferred automatically to the vehicle ident. number box **③**.
Only single selection possible.

**⑦** **Sales designation input box**

For entering a sales designation or a part of it, this limits the overview displayed in the corresponding selection list.

**⑧** **Type/Model input box**

For entering a model, at least 3 digits, this limits the overview displayed in the corresponding selection list. The entry is transferred automatically to the vehicle ident. number box **③**.

ⓘ If WIS cannot identify the vehicle type to which the type model is assigned, the "Vehicle types" submenu is opened. 📖 see section "5.1.2 Vehicle types".

**Individual combination of units possible in Infobox 1**
If you require **another combination** of model, engine and unit than that given in WIS, you can enter this by **manually overwriting** the data in the input box. A plausibility check is not made. However you can still carry out a document search.
Aim: This is the best possible support even for those units possible which have not been marked.

**⑨** **Engine selection list**

For selecting an engine number.

ⓘ Only single selection possible.

**⑩** **Engine number input box**

For entering an engine number, at least 3 digits, this limits the overview displayed in the corresponding selection list.

ⓘ If WIS cannot identify the vehicle type to which the engine is assigned, the "Vehicle types" submenu is opened. 📖 see section "5.1.2 Vehicle types".

**Individual combination of units possible in Infobox 1**
If you require **another combination** of model, engine and unit than that given in WIS, you can enter this by **manually overwriting** the data in the input box. A plausibility check is not made. However you can still carry out a document search.
Aim: This is the best possible support even for those units possible which have not been marked.

⑪　**Type/Unit model selection list**　For selecting a unit model.

　　　　　　　　　　ⓘ　Multiple selection possible.

⑫　**Unit input box**　For entering the corresponding unit abbreviation, this limits the overview displayed in the corresponding selection list (e.g. MG=mechanical gear).

⑬　**Unit number input box**　For entering a unit number, at least 3 digits, this limits the overview displayed in the corresponding selection list.

　　　　　　　　　　ⓘ　The heading of the input box changes depending on the unit number.
　　　　　　　　　　If WIS cannot identify the vehicle type to which the unit number is assigned, the "Vehicle types" submenu is opened. 📖 see section "5.1.2 Vehicle types".

　　　　　　　　　　**Individual combination of units possible in Infobox 1**
　　　　　　　　　　If you require **another combination** of model, engine and unit than that given in WIS, you can enter this by **manually overwriting** the data in the input box. A plausibility check is not made. However you can still carry out a document search.
　　　　　　　　　　Aim: This is the best possible support even for those units possible which have not been marked.

⑭　**Country**　For entering a country (e.g. usa, j, ...).

⑮　**Model year**　For entering a model year (e.g. 1993).

⑯　**SA Code**　For entering an equipment code (3 digits), e.g. 580=air conditioning.

　　　　　　　　　　⇒　The documents belonging to the SA Code are offered in a separate selection list.

⑰　**Documentation**
　　**Alt + D**　Switches to "Infobox 2" and offers further selection criteria there.
　　　　　　　　　　📖 see section "5.2 Infobox 2".

⑱　**Troubleshooting Symptoms**　Opens the "Troubleshooting Symptoms" mask.
　　　　　　　　　　📖 see section "10 Troubleshooting Symptoms".

　　　　　　　　　　ⓘ　The "Troubleshooting Symptoms" action button is only active if at least one model (3-6 digits) has been selected or entered.
　　　　　　　　　　Make sure the engine and unit are selected correctly. 📖 see section "3.2.4 Document search using Troubleshooting Symptoms".

⑲　**Damage code**
　　**Alt + C**　Switches to "Damage code 1", for "Selection of damage code pictures".
　　　　　　　　　　This mask is used for determining the damage code in cases of warranty and expense down to the organization.
　　　　　　　　　　📖 see section "11 Damage Code".

⑳　**ASRA**
　　**Alt + A**　Calls the "ASRA Vehicle requirements". 📖 see section "12 ASRA".

㉑　**ASSYST**　Opens the "ASSYST" mask for the dynamic generation of a vehicle-specific service sheet.

　　　　　　　　　　ⓘ　The "ASSYST" action button is only active for series with the ASSYST function, if a vehicle ident. number or at least a 6 digit model has been selected or entered together with the engine model. 📖 see section "13 ASSYST".

㉒　**Directory**
　　**Alt + I**　The WIS table of contents is called.
　　　　　　　　　　📖 see section "9 Directory – WIS table of contents".

㉓　**Document No.**　For entering acomplete document number or part of the document number.
　　　　　　　　　　📖 see section "5.1.4 Document number".

　　　　　　　　　　ⓘ　**The input can be made with or without dot and hyphen.**

### 5.1.1  Overview of World Manufacturer Codes

The world manufacturer code states the country in which the vehicle was manufactured, is part of each vehicle ident. number and is evident from the vehicle ident. number attached to the vehicle or the vehicle documents and registration document.

| | | | |
|---|---|---|---|
| **3AM** | Mexico | **WD1** | Sprinter |
| **3MB** | Mexico | **WD2** | NAFTA Sprinter |
| **4JG** | M-Class except Europe | **WD3** | Sprinter |
| **5DH** | Mexico Bus | **WD4** | Sprinter |
| **8AB** | Argentina | **WD5** | NAFTA Sprinter |
| **8AC** | Argentina | **WD6** | Unimog NAFTA |
| **9BM** | Brazil | **WD7** | Unimog NAFTA incomplete |
| **ADB** | South Africa | **WD9** | Sprinter |
| **KPA** | South Korea Transporter | **WDB** | Germany |
| **KPD** | South Korea | **WDC** | M-Class-Europe / 203 |
| **KPG** | South Korea | **WDD** | Germany DaimlerChrysler |
| **MHL** | Indonesia | **WDF** | Rest of World (R. o. W) |
| **NMB** | Tukey | **WEB** | EVOBUS Mercedes-Benz |
| **TCC** | smart | **WKK** | EVOBUS Setra |
| **VAG** | G-Wagon Steyr | **WME** | smart |
| **VF9** | EVOBUS France | | |
| **VS9** | EVOBUS Spain | | |
| **VSA** | Spain | | |

### 5.1.2 Vehicle types

The Vehicle types submenu is opened if WIS cannot identify the vehicle type the unit is to be assigned to after input of a type number (e.g. 000) or a unit number (e.g. 615) in "Infobox 1". After selection of the vehicle type, the range and all units possible are displayed in "Infobox 1".
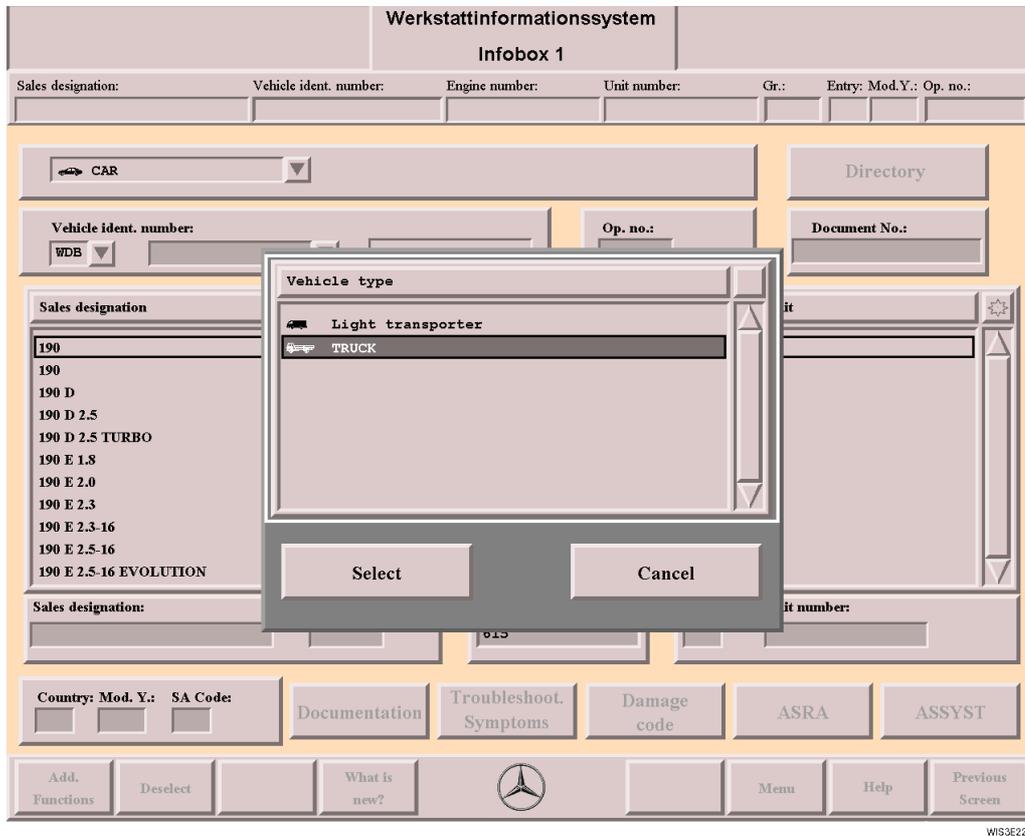


| **Vehicle types** | For selecting the vehicle type desired. |
| --- | --- |
| **Select** | Activates the selected vehicle range in "Infobox 1" and displays the units possible. |
| **Cancel** | Closes the "Vehicle types" selection list. |

### 5.1.3 Display work instructions for special cases?

After entering/selecting the vehicle identification number in "Infobox 1" and subsequently selecting the "Documentation" action button or acknowledging with the ⟨Return⟩ key, the "Display work instructions for special cases?" pop-up menu is displayed.



WIS3E228
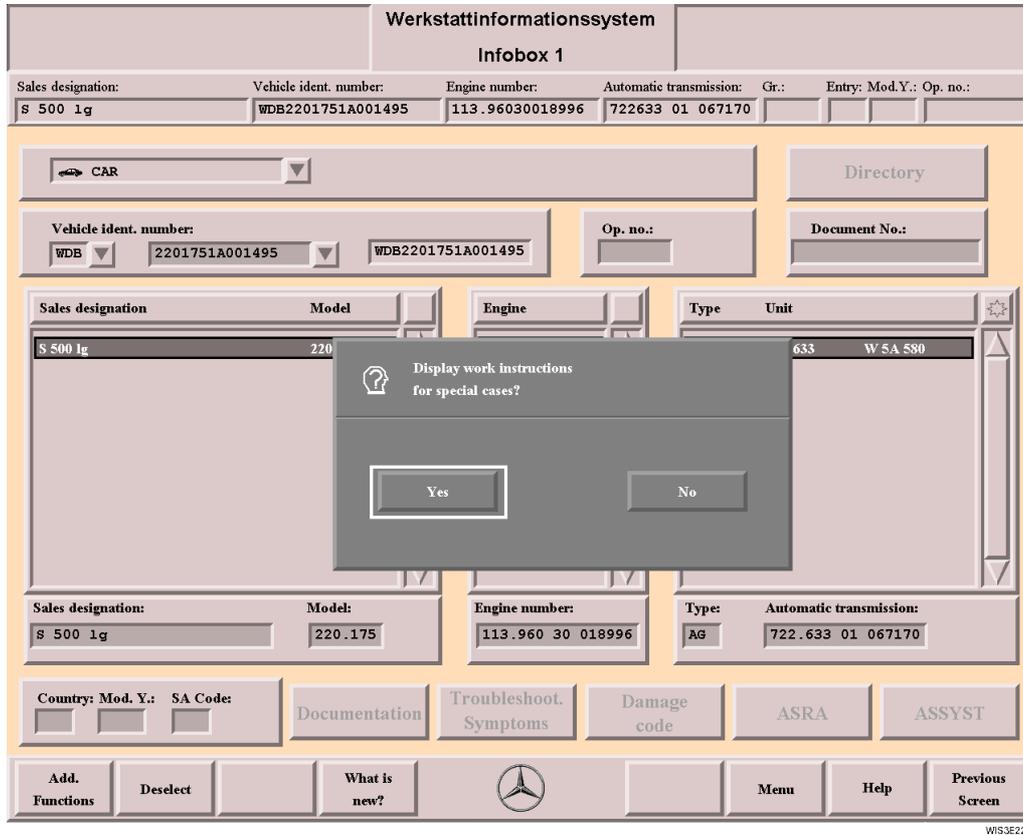
**Yes**    The Document Selection - Display work instructions for special cases is called.
    📖 see section "5.1.3.1 Document Selection - Work instructions for special cases".

**No**    The pop-up menu is closed.

## 5.1.3.1     Document Selection - Work instructions for special cases

Under "Work instructions for special cases" you will find descriptions explaining how a measure is to be carried out and processed.

ⓘ        It is not possible to tell from this whether this concerns the vehicle in question or not. You should check the validity accordingly.



| Selection list | Displays the document title for the "Work instructions for special cases". |
|---|---|
| **Validation** | Contains the validity of the document around which the selection frame is positioned. |
| **Revisions** | Contains information on the reason for the revision/revision date of the document around which the selection frame is positioned. |
| **Display**<br>`Alt` **+ D** | Displays the document(s) selected in the selection list. |
| **Previous Screen** | Closes the "Work instructions for special cases" mask and returns to "Infobox 1". |

## 5.1.4     Document number

Entering a document number in Infobox 1 is a fast way of accessing documents if you know the complete document number or part of it.

ⓘ • The document number can be found in the header area of the document on the top left and is
     e.g. *AR33.20-P-0310A* 📖 see section "6.2 Display Document".

  • Selections in the selection lists "Model", "Engine" and "Unit" in Infobox 1 are **not** taken into consideration during the document search.

  • You should be aware that long response times should be reckoned with for an extensive search (up to several minutes). Once the search has been started, it cannot be interrupted.

**Here are a few examples of possible inputs:**

*ar3320p0310a* Return     Input of a complete document number.
or                                  ⟹ The document is displayed directly.
*ar33.20-p-0310a* Return    ⓘ **The input can be made with or without dot and hyphen.**


*ar3320%* Return         % stands for any character sequence. A search is made using a wildcard.
or                              ⟹ All document titles of applicable documents are displayed in the document selection.
*%3320%*
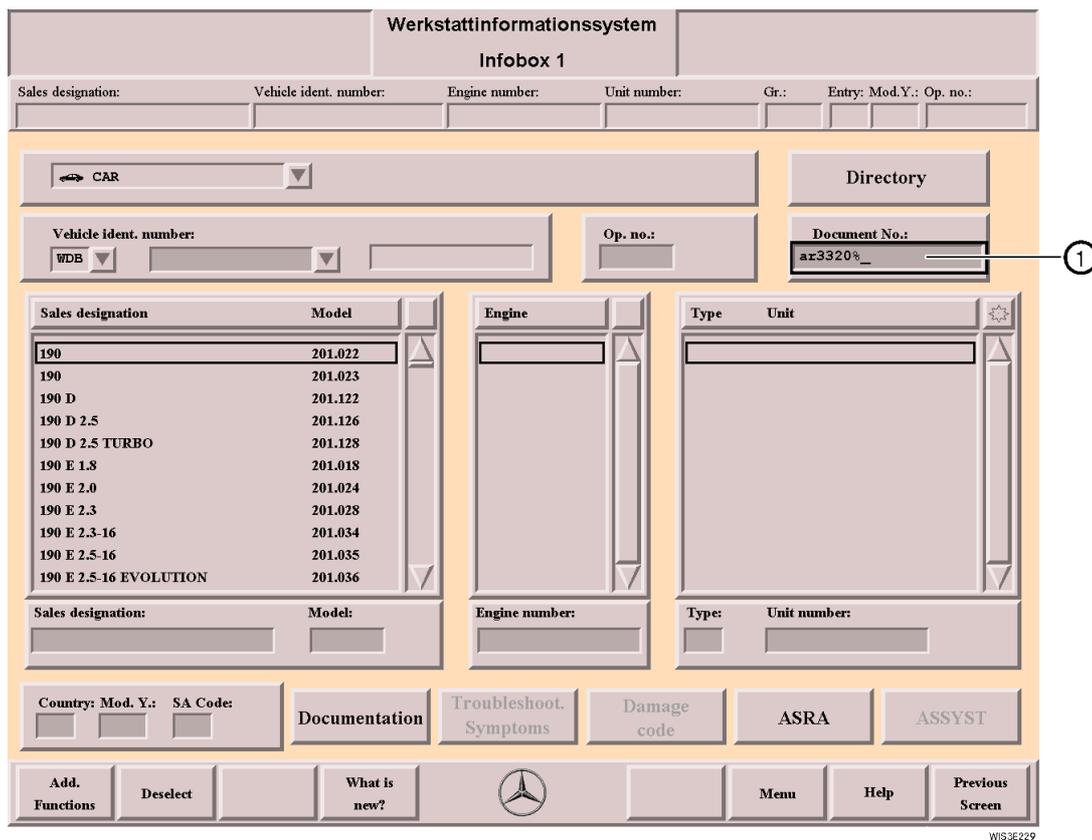


① **Document no.**          For entering a document number. Input must be acknowledged with Return .

## 5.2　　　Infobox 2

In "Infobox 2", the amount of information regarding documentation is further restricted using the selection of **information-specific** criteria. The information-specific restrictions are made by selecting function group(s), if necessary, function subgroup(s) and type(s) of information. The search can be further restricted by entering search terms in the "Search" input box and selecting the "in entire document" ⑧ or "in document title" ⑨ checkboxes.



WIS3E246
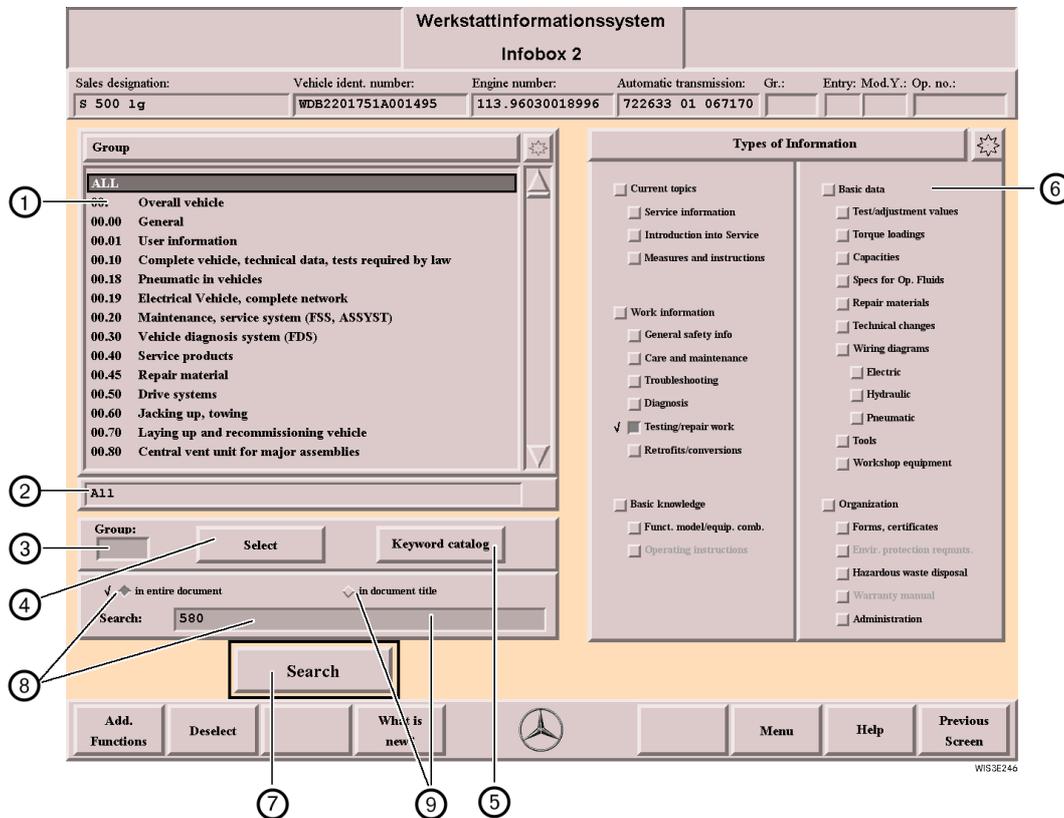
| ① | **Group selection list** | For selecting the function group(s) or function subgroup(s). A maximum of 10 selections can be made. |
|---|---|---|
| | | • By selecting a function group, all relevant function subgroups are selected as well. The groups selected are displayed in the Group information box ②. |
| | | • If the entry **ALL** is marked, all the function groups (**00-99**) are selected. |
| ② | **Group information box** | Lists the function group(s) and function subgroup(s) selected in the Group selection list. |
| ③ | **Group input boxes** | For entering a function group, if necessary in connection with a function subgroup. After pressing the ⌨Return key, the selection frame in the selection list goes to the function group/subgroup entered. |
| | | ⓘ The group entered is only active after selection in the "Group selection list" ① or the "select" action button ④. |
| ④ | **Select** | For confirming the entry in the "Group" input box. This leads to automatic selection of the function group/subgroup in the group selection list. |
| | | ⓘ "select" is a toggle switch, it activates/deactivates the function group/function subgroup entered in the "Group input box" ③. |
| ⑤ | **Keyword catalog** | Opens the "Keyword catalog" selection list to search for a keyword and select the function group/ function subgroup. 📖 see section "5.2.1 Keyword catalog". |
| ⑥ | **Types of information** | For selecting the types of information in the workshop documentation. Multiple selection possible. 📖 see section "6.1.1 Organization of the types of information (TI)". |

⑦ **Search**            Starts the document search under the criteria selected in "Infobox 1" and "Infobox 2" and opens
   Alt + S              the "Document Selection" mask. 📖 see section "6.1 Document Selection".

⑧ **Search in entire    Input search term in "Search" input box. Then the program restricts the search. The subsequent
   document**            search in the document will find only terms that are known and valid. The **document content** is
                        searched for the letter sequence input based on a full-text search. The search is generally related
                        to the selected search context (function groups/function subgroups, information types and se-
                        arch term). The document selection list only shows the documents that contain the search term
                        in the document content.

                        The terms that are found are highlighted grey in the document. In "System Configuration", you
                        can define whether or not terms found during the search are to be highlighted in this way.
                        📖 see section "16.1 System Configuration".

Engine 111
with PEC fuel injection and ignition system
Engine 104, 111
with HFM-SFI fuel injection and ignition
system
Engine 104, 111, 112, 113, 119, 120
with ME-SFI fuel injection and ignition
system

WIS3E257

**Possible inputs for search "in entire document":**

cool            Search for a complete word
                **Possible hits:** cool, Cool, cool-, Cool-

cool%           Search with a wildcard (%). The wildcard (%) corresponds to any number of
                characters. It can be used at the start and/or end of the search term.
                **Possible hits:** coolant, cooling system

%cool%          Search with multiple wildcards
                **Possible hits:** cooling system, coolant

radiat% console% Search with AND function
                The terms must be separated by a space.
                Only the documents that contain both terms are shown.
                **Possible hits:** radiator, center console

no input        If nothing is input into the input box, the default search is run.

ℹ️  The search is generally not case sensitive. Exception:
    Abbreviations and fixed terms that are written completely in capital letters are only detected
    as such.
    For example: A search with the search term "ASSYST plus" will not find the term "ASSYST
    PLUS".
    Currently at least two letters must be input.
    A maximum of 44 characters may be input.

⇒  The search can also be used to search for the "Diagnosis Fault Codes" if this documen-
    tation is available in the WIS.

⑨ **Search in document title**

Input search term in "Search" input box. Then the program restricts the search. The subsequent search in document title will find only terms that are known and valid. The **document title** will be searched for the input character sequence. The search is generally related to the selected search context (function groups/function subgroups, information types and search term). The document selection list shows only the documents that contain the search term in the document title.

**Possible inputs for search "in document title":**

| | |
|---|---|
| ABS | Search for a complete word |
| | **Possible hits: ABS**/ESP warning light comes on |
| abs% | Search with a wildcard (%). The wildcard (%) matches any number of characters. It can be used at the start and/or end of the search term. |
| | **Possible hits:** Removal and installation of **ABS** system; Shock **abs**orber |
| %ABS% | Search with multiple wildcards |
| | **Possible hits:** rear **ABS** sensor does not function |
| ABS% rear% | Search with AND function |
| | The terms must be separated by a space. |
| | Only the documents that contain **both** terms are shown in the document title. |
| | **Possible hits:** remove and install **rear ABS** system. |
| no input | If nothing is input into the input box, the default search is run. |

ⓘ The search is generally not case sensitive. Exception:
Abbreviations and fixed terms that are written completely in capital letters are only detected as such.
For example: A search with the search term "ASSYST plus" will not find the term "ASSYST PLUS".
Currently at least two letters must be input.
A maximum of 44 characters may be input.

ⓘ The search can be continued within the document with the "Search" function, which is opened using "Document Functions" 📖 see section "7.6 Search".

## 5.2.1 Keyword catalog

The "Keyword catalog" offers a search mechanism which determines the function group/function subgroup association to specific technical terms.

**Please note the following steps when using the keyword catalog:**

- Input of the search term or part of it (e.g. oil). Uppercase/lowercase can be entered. Confirm the input with Return.
- The first term found is shown marked in the selection list.
- Return or selection of the corresponding search arrow allows the found terms to be displayed in sequence.
- The "Select" action button transfers the function group/subgroup to the "Group Selection List".
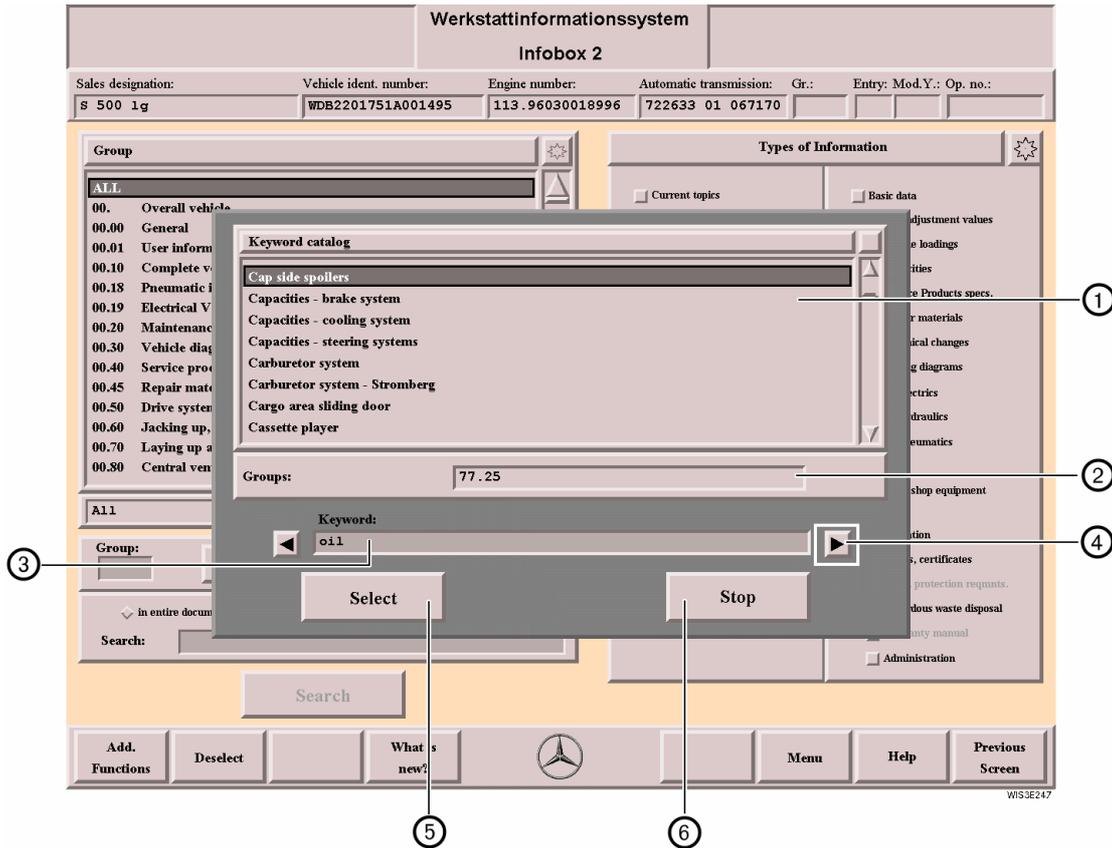


| ① | **Keyword catalog** | For displaying or selecting technical terms which are assigned to a function group/subgroup. The "Keyword Catalog" is arranged alphabetically. |
|---|---|---|
| ② | **Allocated groups** | This information box displays the function group/function subgroup allocation, depending on the term selected in the selection list. |
| ③ | **Keyword** Return | For entering the search term or a part of it (at least 3 letters). The search is started with Return and the term found is shown marked. <br> ℹ️ Abbreviations must be concluded with a comma (e.g. AG,) as otherwise all entries are found which contain this letter combination (e.g. airb**ag**). |
| ④ | **Search arrow** | If several terms or parts of them are identical to the search term, once the search has been started, you can go forwards or backwards within the "Keyword catalog" selection list using the search arrows. |
| ⑤ | **Select** | Closes the "Keyword catalog" selection list and selects the appropriate function group/sub-group(s) in the "Group" selection list. |
| ⑥ | **Stop** | Closes the "Keyword catalog" selection list. |

# 6          Document Selection/Display

The Document Selection/Display Document is identical in all the WIS masks and is described in detail in the following.

## 6.1          Document Selection

The  "Document Selection" shows the result of the documentation search and lists the titles of the documents found. The documents are displayed by selecting one or several document titles and the "Display" action button.

The document selection is divided into two areas after the documentation search by making an input in the Entry, model year (Mod. Y.) and SA code input boxes in "Infobox 1".

- **Documents**
  Contains the document titles generally valid.

- **Documents for extras**
  Contains the document titles for extras (SA Code) entered in "Infobox 1".
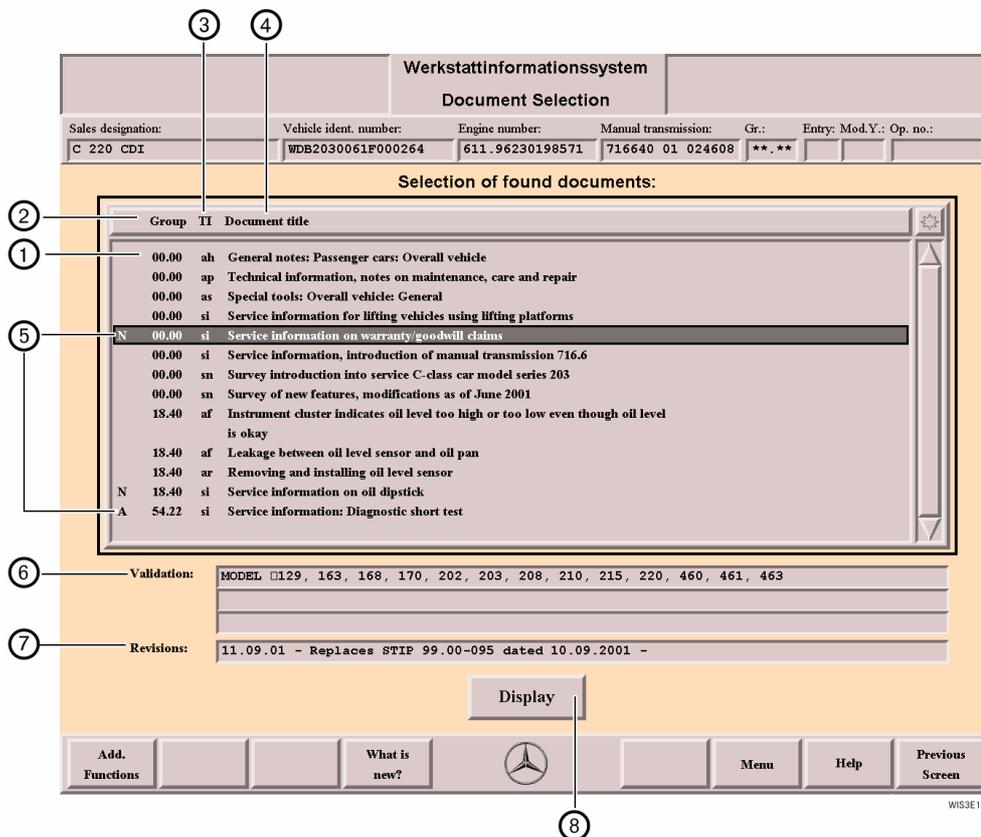


| ① | **Selection of found documents** | Lists the individual document titles. One or several document titles can be selected. |
|---|---|---|
| ② | **Group** | Specifies the function group/subgroup to which the document is allocated. |
| ③ | **TI** | Indicates the type of information as code.<br>📖 see section  "6.1.1 Organization of the types of information (TI)". |
| ④ | **Document title** | Displays the document title. |

⑤ **Document code**   The following document codes are possible:

**N**   The document is new and on a DVD for the first time.
📖 see section "8.1 Changes/New".

**A**   The document has been modified compared to the previous DVD edition.
📖 see section "8.1 Changes/New".

**T**   The document is coded as "Top News" and has been declared as particularly noteworthy for a longer period of time regardless of the DVD edition.
📖 see section "8.2 Top News".

⑥ **Validation**   Contains the validity of the document around which the selection frame is positioned.

⑦ **Revisions**   Contains information on the reason for the revision/revision date of the document around which the selection frame is positioned.

⑧ **Display**   Displays the document(s) selected in the document selection list.
**Alt + D**
ⓘ If several document titles have been selected in the "Document Selection", the documents are nested. You can change between the individual documents using "Document Functions". 📖 see section "7 Document Functions".

## 6.1.1    Organization of the types of information (TI)

The restructuring of the workshop documentation also affected the abbreviations and labeling of the information. Before the Workshop Information System (WIS) was introduced, there were types of documentation. These types of documentation were replaced by uniformly structured types of information.

However, as the "Old Documentation" (CASE 1) is still needed for repair, maintenance and care of the vehicles, this led to the workshop documentation being provisionally published in the formats CASE 1 (documentation up to approx. 1995) and CASE 2 (documentation from approx. 1995) with different descriptions of the information.

**The types of information listed in the Infobox 2 are assigned to the following main types of information:**

- **Current topics**
  Information on new items/modifications (e.g. Introduction into Service), work instructions for special cases, service information.

- **Work information**
  Information on repair procedures, maintenance work, fault information with information on cause and remedial measures, diagnosis, testing work, exhaust inspection, retrofits/conversions, assembly of accessories, general information, safety information.

- **Basic knowledge**
  Function descriptions, technical data, information on model/equipment combination.

- **Basic data**
  Test/adjustment values, torque loadings, capacities, service products specifications, technical changes, repair materials.

- **Wiring diagrams**
  Electrics, hydraulics, pneumatics.

- **Tools**
  Information on special tools, self-made tools, commercial tools, workshop equipment.

- **Organization**
  Hazardous waste disposal, questions on procedure, forms.

## 6.1.1.1    Grouping and codes for the types of information (TI)

The types of information for the Old and New Documentation may be allocated different codes.

| Square in Infobox 2 | Old Documen-tation code (CASE 1) | New Documen-tation code (CASE 2) | Type of information/documentation |
|---|---|---|---|
| **Current** | | | |
| Service information | — | si | New, changed topics |
| Service information | si | — | Service information |
| Service information | sn | — | SI next service |
| Introduction into Service | — | sn | New model |
| Measures and instructions | aa | — | Work instruction |
| Measures and instructions | kd | — | Servicing procedure |
| Measures and instructions | — | sm | Servicing procedures (Actions) |
| | | | |
| **Work information** | | | |
| General safety information | — | ah | General information |
| General safety information | — | as | Safety information |
| Care and maintenance | wh | — | Maintenance manual |
| Care and maintenance | — | ap | Care and maintenance |
| Fault finding | fs | — | Troubleshooting |
| Fault finding | — | af | Trouble shooting |
| Diagnosis | dh | — | Diagnosis manual |
| Diagnosis | — | ad | Diagnosis |
| Diagnosis | hh | — | HHT supplementary documentation |
| Test/repair work | ra | — | Repair instruction |
| Test/repair work | — | ar | Testing/repair work |
| Test/repair work | fu | — | Vehicle inspection |
| Post installation/alterations | ea | — | Installation instructions |
| Post installation/alterations | — | az | Retrofits/conversions; accessories |
| Post installation/alterations | — | an | Retrofits/conversions ; extras |
| | | | |
| **Basic knowledge** | | | |
| Function model/equipment combination | — | gf | Funct. model/equip. comb. |
| Operating instructions | — | gb | Operating instructions |
| | | | |
| **Basic data** | | | |
| Test/adjustment values | — | be | Test/adjustment values |
| Torque loadings | — | ba | Torque loadings |
| Capacities | — | bf | Capacities |
| Operating Fluids | — | bb | Service products |
| Operating Fluids | bs | — | Service product specs. |
| | | | |
| Repair materials | — | br | Repair materials |
| Technical changes | — | bt | Technical changes |

| Square in Infobox 2 | Old Documen-tation code (CASE 1) | New Documen-tation code (CASE 2) | Type of information/documentation |
|---|---|---|---|
| **Circuit diagrams** | | | |
| Electrics | el | – | Wiring diagrams |
| Electric | – | pe | Electric |
| Hydraulic | – | ph | Hydraulic |
| Pneumatic | – | pp | Pneumatic |
| | | | |
| **Tools** | | | |
| Tools | sw | – | Special tools catalog |
| Tools | – | ws | Special |
| Tools | – | wh | Commercially available |
| Tools | – | wf | Manufacture self |
| Workshop equipment | – | we | Equipment |
| | | | |
| **Organization** | | | |
| Forms, certificates | wb | – | Maintenance sheet |
| Forms, certificates | – | of | Forms, certificates |
| Hazardous waste disposal | – | os | Hazardous waste disposal |
| Administration | – | ov | Administration |

## 6.2          Display Document

In the "Display Document", the document whose title was selected in the "Document Selection" is displayed. If several document titles were selected, the documents are nested. You can change between the individual documents using "Document Functions".
📖 see section "7 Document Functions".

**The documents are shown differently as:**
- Old Documentation (CASE 1)  📖 see section "6.2.1 Display Document Old Documentation (CASE 1)".
- New Documentation (CASE 2) 📖 see section "6.2.2 Display Document New Documentation (CASE 2)".
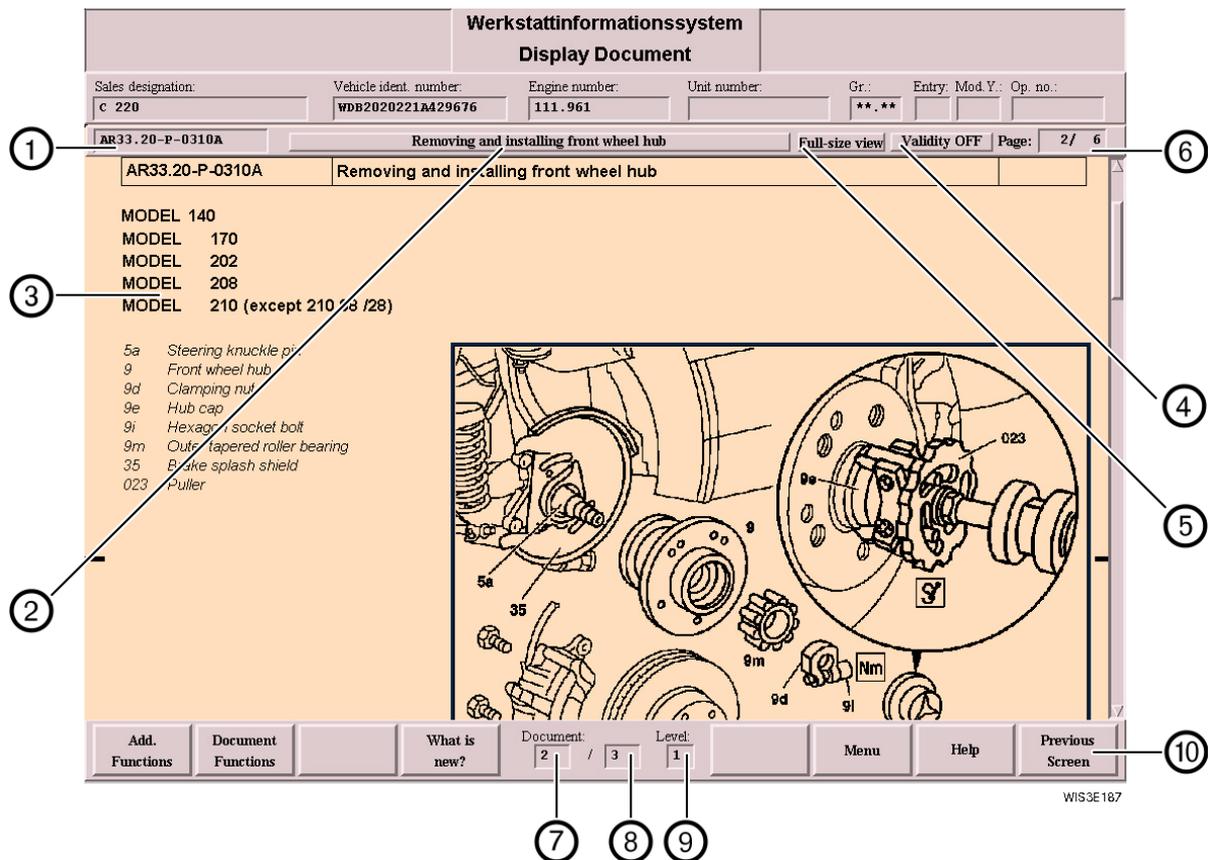


|   ① | **Document number** | For identifying the document. |
|---|---|---|
| | | With the document number or part of it, a documentation search can be started from "Infobox 1" by entering the document number.<br>📖 see section "5.1.4 Document number".<br>📖 see section "3.2.2 Document search using the document number".<br>ℹ️ If there is a fault in the workshop documentation, the "WIS fault report" document should be called by entering the document number (*OF00.01-P-3001A*) in "Infobox 1" and printed.<br>📖 see section "6.6 Fault report". |
| ② | **Document title** | The document title is found in this box (is identical to the document title from the Document Selection list).<br>ℹ️ If a document title is not completely visible, a submenu can be opened by selecting the document title which then displays the entire document title. |
| ③ | **Document validity** | Validity information on the document.<br>The document validity can be activated/deactivated by the "Validity" button ④. |

| ④ | **Validity** | Toggle switch between |
|---|---|---|

- **Validity ON**
  Display with document validity ③.
- **Validity OFF**
  Display without document validity.

| ⑤ | **Full-size view/ Standard view** | Toggle switch between full-size view and standard view. |
|---|---|---|

- **Full-size view**
  Hides the header area and the function bar. The document is displayed over the entire screen area.
- **Standard view**
  Standard view with header area and function bar visible.

| ⑥ | **Page** | The page information refers to the screen page. |
|---|---|---|

The number **in front of** the slash indicates the page of the document currently displayed.

The number after the slash indicates the total number of pages in the document.

**Example:** 2/4 means the second page from a total of 4 screen pages in the document is currently displayed.

ⓘ  The number of screen pages is not identical to the number of pages printed.

**Document/Level display**

| ⑦ | | Displays which of the documents selected from the document selection list is being currently displayed. |
|---|---|---|
| ⑧ | | Displays how many documents in the document selection list are selected, referring to the respective level. |
| ⑨ | | Displays the level where the document displayed is found. |

| ⑩ | **Previous Screen** | Goes back |
|---|---|---|

- to the document displayed last.
- or from the first document back to the "Document Selection".

| Page↑ | | • Pages one screen back within a document. |
|---|---|---|
| Page↓ | | • Pages one screen on within a document. |

ⓘ  Pages in the document using the scroll bar  📖 see section "2.4.7 Scroll bar".

| ⊞ | | • Moves the selection frame down to the next sensitive box or picture. |
|---|---|---|
| ⊟ | | • Moves the selection frame up to the previous sensitive box or picture. |

### 6.2.1    Display Document Old Documentation (CASE 1)

This concerns the familar microfilm and paper documentation (up to approx. 1995).

The features of CASE 1 documentation are:

- Display in portrait format (except for the "Diagnosis" information type).
- Call of references to other documents can only be made using "Document Selection/Reference".
  📖 see section  "7.4 Reference".
- The documentation is only sorted according to function group (with the exception of function group 07).
- Electrical wiring diagrams and circuit diagrams are part of the corresponding description (e.g. function description, diagnosis, ...).

## 6.2.2        Display Document New Documentation (CASE 2)

This concerns documentation created specially for WIS.

Features of CASE 2 documentation are:

- Modular structure of the information (documents).
- Display in landscape format.
- Reference to further information via reference addess within the entry table.
- Document allocation according to function group/function subgroup.
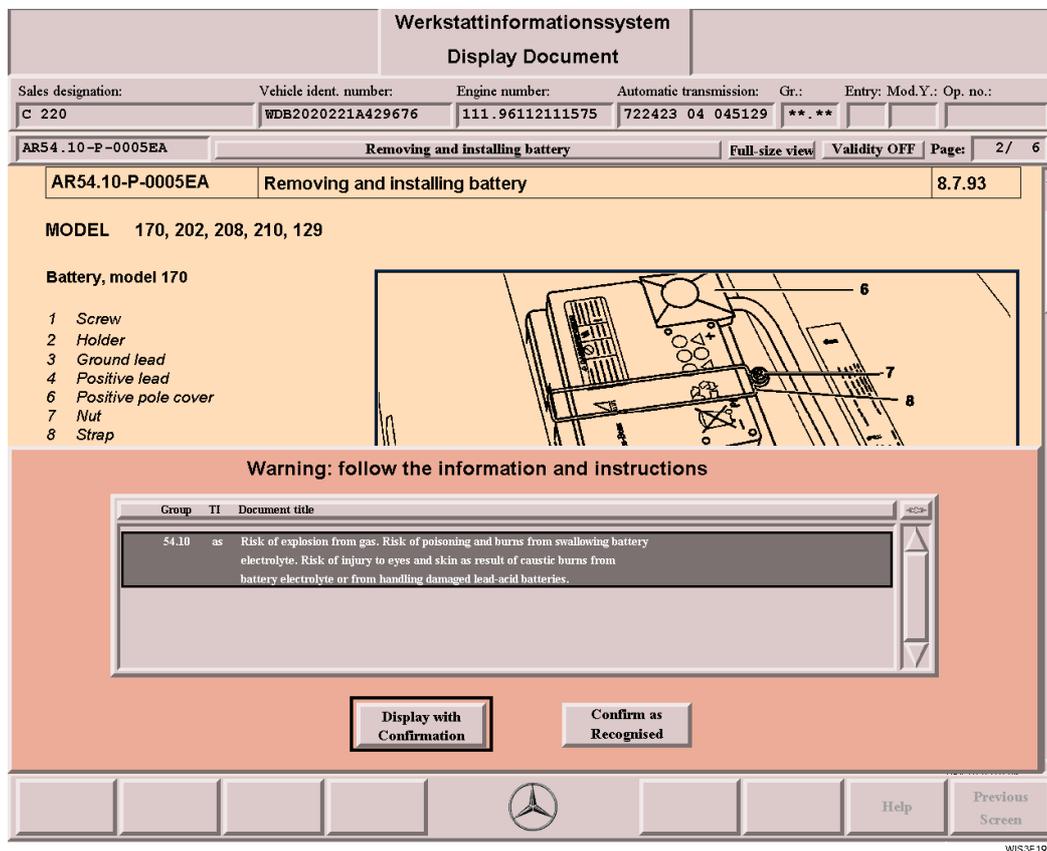- Additional function "Profi select" possible, 📖 see section "14.1 Profi select/deselect".
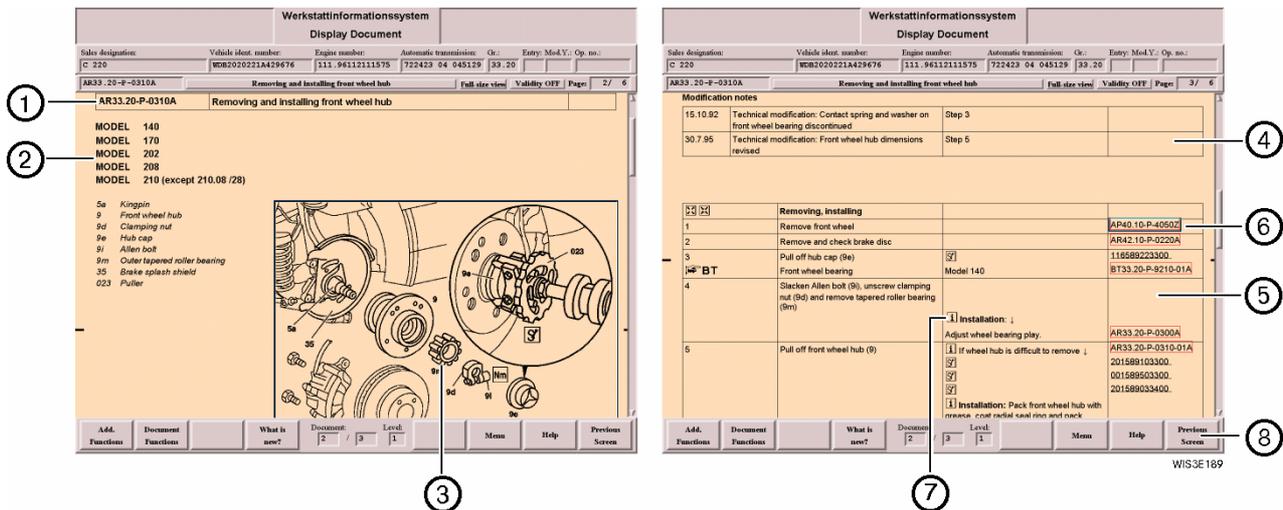


| ① | **Title bar** | Consisting of: |
|---|---|---|
|   |   | • Document number |
|   |   | • Document title |
|   |   | • Where applicable, creation date of the document |
|   |   | • Where applicable, information (e.g. validity data, logos, ...) |
| ② | **Validity** | Validity of the document. |
| ③ | **Pictures** | Where applicable, picture information with picture legends are displayed. Integrated icons (logos) refer to a special feature. The icons are explained within the document (e.g. in work step table, work information table, ...). |
| ④ | **Modification note** | Where applicable, a modification reference table with information on the reason for the modification is displayed. Detailed information can be displayed if necessary by selecting the reference address. |
| ⑤ | **Entry table** | In the "Entry table" (e.g. work step table), the chronological sequence of individual steps or information is listed. The "Entry table" is divided into four columns. Where applicable, there are "Reference addresses" ⑥ in the fourth column. |
| ⑥ | **Reference** | A differentiation is made between: |

- **External reference**
  The external reference is marked by a red border with display of the reference address. The document concerned is displayed after the reference has been selected.
- **Internal reference**
  The internal reference is marked by a black border with display of the reference address. After a selection, a jump is made within the document e.g. to torque loadings tables, commercial tools, special tools, ...

📖 see section "2.4.11 Reference".

⑦ **Icons in the document**　An explanation of the icons used in the workshop documentation can be called using the "WIS directory", "User information".

📖 see section "9 Directory – WIS table of contents".

⑧ **Previous Screen**　Goes back
- to the document displayed last.
- or from the first document back to the "Document Selection".

## 6.3　Following information and instructions

If a document has a "Warning" (if the information is not heeded there is risk to life and limb), a document selection list "Warning: follow the information and instructions" is placed over part of the work area in the "Display Document". The document titles of the warning information are listed here.

The visible part of the work area under this can only be edited if the document title(s) have been selected and acknowledged accordingly.



| | Werkstattinformationssystem |
| Display Document |

| Sales designation: | Vehicle ident. number: | Engine number: | Automatic transmission: | Gr.: | Entry: Mod.Y.: Op. no.: |
| C 220 | WDB2020221A429676 | 111.96112111575 | 722423 04 045129 | **.** | |

AR54.10-P-0005EA　Removing and installing battery　Full-size view　Validity OFF　Page: 2/ 6

| AR54.10-P-0005EA | Removing and installing battery | 8.7.93 |

**MODEL**　170, 202, 208, 210, 129

**Battery, model 170**

1　Screw
2　Holder
3　Ground lead
4　Positive lead
6　Positive pole cover
7　Nut
8　Strap

**Warning: follow the information and instructions**

| Group | TI | Document title |
| 54.10 | as | Risk of explosion from gas. Risk of poisoning and burns from swallowing battery electrolyte. Risk of injury to eyes and skin as result of caustic burns from battery electrolyte or from handling damaged lead-acid batteries. |

[ Display with Confirmation ]　[ Confirm as Recognised ]

Help　Previous Screen

WIS3E190

**Display with Confirmation**　Displays the "Warning Documents" selected.

[Alt] + D　　ⓘ The action button is only active if one/several document titles are selected in the list.

**Confirm as Recognised**　Confirms that the warning documents selected have been read and closes the "Warning: follow the information and instructions" document selection list.

[Alt] + C

　ⓘ The action button is only active if one/several document title(s) have been selected in the list.

## 6.4         Wiring diagrams (Electrics, Pneumatics, Hydraulics)

The wiring diagrams are assigned to the familiar function groups/subgroups.

Each diagram is preceded by a document from which the user has the option of calling the wiring diagram graphics or further information such as e.g. arrangement and assignment of ground points, arrangement and assignment of Z connector sleeves, ...

### 6.4.1         Access to the electrics wiring diagram

ⓘ         Assumes that the user knows which function group/subgroup the corresponding wiring diagram is assigned to.

**Wiring diagram call:**

- Infobox 1: Enter model/engine/unit or vehicle ident. number.
- Infobox 1: Select the "Documentation" action button.
- Infobox 2: Select the "Electrics" type of information.
- Infobox 2: Select the function group/subgroup.
- Infobox 2: Select the "Search" action button.
- Document Selection: Select wiring diagram desired.
  - ⇒ The document which precedes the wiring diagram is called.
    Here the user has the option of calling the wiring diagram display (reference in the 1st row of the table) or further information on this wiring diagram such as e.g. arrangement and assignment of ground points and arrangement and assignment of Z connector sleeves, ...



ⓘ     **Reference**         Reference to the wiring diagram display. After selection the document display of the wiring diagram is made. 📖 see section "6.4.3 Display Document Electrics/Pneumatics wiring diagrams".

### 6.4.2　　Further ways of calling the electrics wiring diagram

1. **The function group/subgroup assigned to the electrical diagram is known.**
   - "Infobox 1":
     Enter  *pe0001z0999%*  in the "Document no." input box.
   - Return
   - The "Electrics wiring diagram" with references to the range (e.g. passenger car) is called.
   - Select the corresponding reference address.
   - A **wiring diagram overview** (of all function groups) is called with references to the wiring diagrams.
   - Select the corresponding reference.
   - The function group-related overview of the wiring diagrams is called.
   - Select the corresponding reference.
   - ⇒ The document which precedes the wiring diagram is called.
     Here the user has the option of calling the wiring diagram display (reference in the 1st row of the table) or further information on this wiring diagram such as e.g. arrangement and assignment of ground points and arrangement and assignment of Z connector sleeves, ..

2. **The function group/subgroup assigned to the electrical diagram is not known.**
   - "Infobox 1":
     Enter  *ov0001z1900%*  in the "Document no." input box.
   - Return
   - The "Wiring diagrams search aid" document is called.
   - Select the reference of the corresponding "Search aid through all wiring diagram groups".
   - A **model-related overview** with function group, function subgroup, name of the wiring diagram and information on validity is called.
   - Select the corresponding reference.
   - ⇒ The document which precedes the wiring diagram is called.
     Here the user has the option of calling the wiring diagram display (reference in the 1st row of the table) or further information on this wiring diagram such as e.g. arrangement and assignment of ground points and arrangement and assignment of Z connector sleeves, ...

3. **Call the electrics wiring diagrams using the WIS table of contents,** 📖 see section  "9 Directory – WIS table of contents".

### 6.4.3     Display Document Electrics/Pneumatics wiring diagrams

The actual display of the electrics/pneumatics wiring diagrams is made in this document.
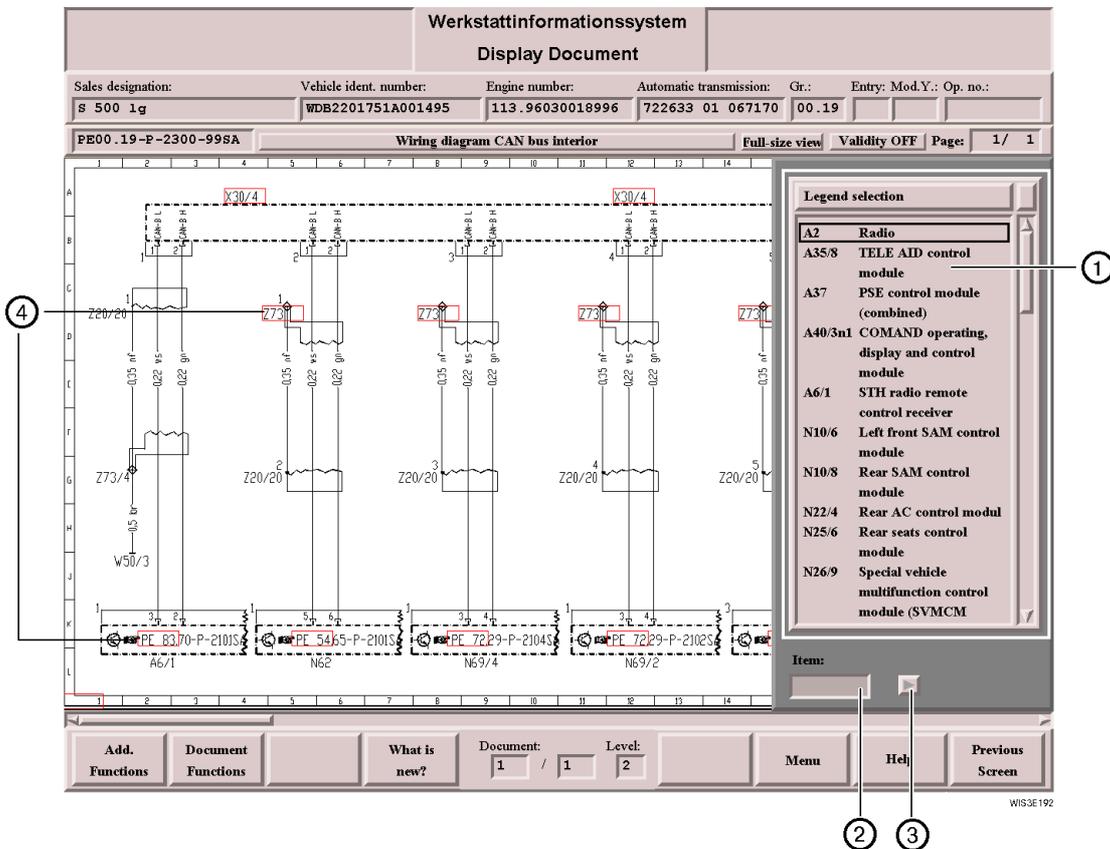


① **Legend selection**        Contains the items available in the wiring diagram with code and name. When an item is marked
   **Alt + O**                in the Legend selection, the component selected is displayed in the wiring diagram by a flashing
                              arrow. The flashing of the arrow can be stopped by moving the mouse.

                              The "Legend selection" can be shown or hidden using the "Document Functions" or using the
                              key combination Alt + O . 📖 see section "7 Document Functions".

② **Item**                    For entering a code from the "Legend selection".

                              By pressing Return the item is displayed in the wiring diagram by a flashing arrow. The flashing of
                              the arrow can be stopped by moving the mouse.

③ **Search arrow**            Looks for an item entered in the "Item" input box in the wiring diagram and displays this with a
                              flashing arrow. The search can be repeated by selecting the search arrow again. The flashing of
                              the arrow can be stopped by moving the mouse.

                              ℹ️  The search arrow is only active (highlighted black) if the item looked for occurs several
                                 times in the wiring diagram 📖 see section "2.4.10 Search arrow".

④ **Sensitive boxes**         Using sensitive boxes, further information can be displayed directly from the wiring diagram
   **(from type 220)**        (e.g. wiring diagrams, arrangement of components, meaning of the abbreviation of the signal
                              and terminal markings). The sensitive boxes are marked by a red border.
                              The reference information is displayed after selecting.

                              ℹ️  The sensitive boxes are **not** active if the legend is hidden or when zooming in the wiring
                                 diagram. 📖 see section "17 Tips and Tricks".

### 6.4.4 Print wiring diagram

**You must perform the following steps:**

- Call up "Document Functions/Print" 📖 see section "7.3 Print".
- The "Print Functions" include the following additional functions for printing out wiring diagrams:
  - **Scale in %**
    For entering a scale in %.
    Example: If you wish to print out four pages with a scale of 100 %, the printout can be reduced to two pages if scaled to 50 %. The wiring diagram is then correspondingly smaller on the printout. On the other hand, a very small wiring diagram can be shown three times larger on the printout with a scale of 300 %.
  - **Fit To Page**
    The wiring diagram is scaled in such a way that the entire wiring diagram is printed out on one page.



WIS3E259
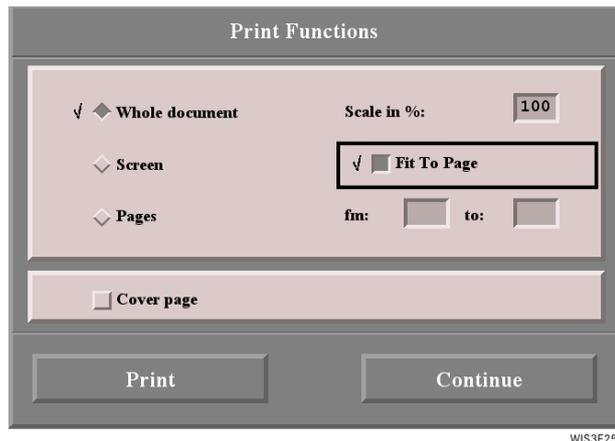
### 6.4.5 Print legend of wiring diagram

**You must perform the following steps:**

- Call up "Document Functions/Print".
- Activate the "Cover page" square.
  - ⇒ The wiring diagram legend is printed on the cover page. 📖 see section "7.3 Print".

**or**

- Call up "Document Functions/Reference". 📖 see section "7.4 Reference".
- Select the document title "Legend of wiring diagram ...".
- Select the "Display" action button.
- Call up "Document Functions/Print".
- Activate the hash "Whole document".
  - ⇒ The "Legend of wiring diagram ..." is printed out in full.

## 6.5 Zooming in the picture

By clicking a picture, the part of the picture selected is displayed magnified (double magnification).
The picture is reduced to its normal size by clicking the picture again.

ℹ️    The zoom function in the picture can only be executed with the mouse.
The sensitive boxes are not active when zooming in the wiring diagram.

**Zoom functions are possible in:**

- Pictures
- Pictures of special tools
- Wiring diagrams 📖 see section "6.4.3 Display Document Electrics/Pneumatics wiring diagrams"
- Damage code pictures 📖 see section "11.2 Damage Code 2".

## 6.6 Fault report

Using the fault report, the WIS user can pass on comments such as e.g. unreadable/incorrect document to the department responsible. This guarantees a fast fault elimination.

The following fault report forms are possible:

- WIS fault report form
- EPC fault report form
- DAS fault report form
- ASRA fault report form

**Ways of opening the fault report forms:**

**1. Input of the document number**

- „Infobox 1"
  - Enter *OF00.01-P-3001A* in the "Document no." input box. (The document number can be entered with or without hyphen.)
  - Return
  - Select the reference for the fault report form you require.
  - The fault report can be printed using the "Document Functions". It must be filled in corresponding to the complaint and sent to the fax number given.

**2. Using "Directory"**

- „Infobox 1"
  - Select the "Directory" action button.
  - Select the reference "WIS, EPC, DAS, ASRA fault report form".
  - Select the reference for the fault report form you require.
  - The fault report can be printed using the "Document Functions". It must be filled in corresponding to the complaint and sent to the fax number given.

| | Werkstattinformationssystem | |
| --- | --- | --- |
| | Display Document | |

| Sales designation: | Vehicle ident. number: | Engine number: | Unit number: | Gr.: | Entry: Mod.Y.: Op. no.: |
| --- | --- | --- | --- | --- | --- |

| OF00.01-P-3001A | User information fault report forms | Full-size view | Validity OFF | Page: | 1/ 1 |
| --- | --- | --- | --- | --- | --- |

| OF00.01-P-3001A | User information fault report forms | 23.3.00 |
| --- | --- | --- |

MODEL    all

| | WIS fault report form | All models | OF00.01-P-3001-01A |
| --- | --- | --- | --- |
| | EPC fault report form | All models | OF00.01-P-3001-02A |
| | DAS fault report form | All models | OF00.01-P-3001-03A |
| | ASRA fault report form | All models | OF00.01-P-3001-04A |

| Add. Functions | Document Functions | | What is new? | Document: 1 / 1 | Level: 1 | | Menu | Help | Previous Screen |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

WIS3E230

ⓘ We recommend you create the WIS fault report as bookmark 📖 see section "14.3 Bookmark".

# 7          Document Functions

The "Document Functions" submenu is offered exclusively in connection with an opened document and contains all the functions necessary for easy handling of documents.

ℹ️       The "Document Functions" function button is also offered in "Damage Code 2" but has its own functionality,
📖 see section "11.2 Damage Code 2".



WIS3E258
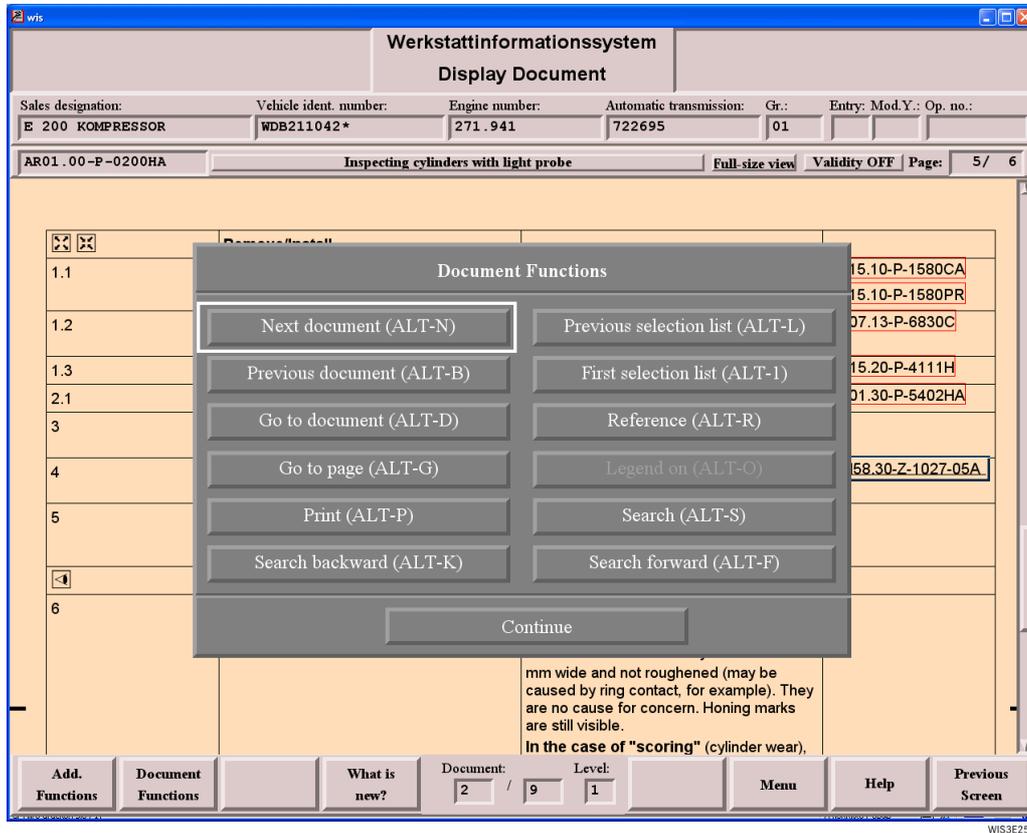
| | |
|---|---|
| **Next document**<br>`Alt` + N | Goes forwards to the next document selected within the document selection list. |
| **Previous document**<br>`Alt` + B | Goes back to the previous document selected within the document selection list. |
| **Go to document**<br>`Alt` + D | Opens the "Go to document" submenu and enables a direct move to a document selected within the document selection list.<br>📖 see section "7.1 Go to document". |
| **Go to page**<br>`Alt` + G | Opens the "Go to page" submenu and enables a direct move to a page selected within the document displayed.<br>📖 see section "7.2 Go to page". |
| **Print**<br>`Alt` + P | Opens the "Print Functions" submenu and enables a direct selection of the area of the document to be printed.<br>📖 see section "7.3 Print". |
| **Previous selection list**<br>`Alt` + L | To go to the previous document selection list which was offered.<br>ℹ️  Several selection lists are available only if Reference has been selected. |
| **First selection list**<br>`Alt` + 1 | To go to the **first** document selection list which was offered. |
| **Reference**<br>`Alt` + R | The "Select References" document selection list is opened and enables a transfer to "Reference documents". 📖 see section "7.4 Reference". |

| **Legend on / off** | The wiring diagram legend can be shown/hidden for a better overview. |
| Alt + O | 📖 see section "7.5 Legend on/off". |
| **Search** | Opens the "Search" submenu and enables a full-text search in the displayed document. |
| Alt + S | 📖 see section "7.6 Search". |
| **Search backward** | If a search term has been entered in the "Search" submenu, you can search backwards in the |
| Alt + K | document for the previous search term using the "Search backward" function. |
| | 📖 see section "7.6 Search". |
| **Search forward** | If a search term has been entered in the "Search" submenu, you can search forwards in the doc- |
| Alt + F | ument for the next search term using the "Search forward" function. |
| | 📖 see section "7.6 Search". |
| **Continue** | Closes the "Document Functions" submenu. |

## 7.1 Go to document

The "Go to document" submenu enables a direct move to a document selected with the document selection list.
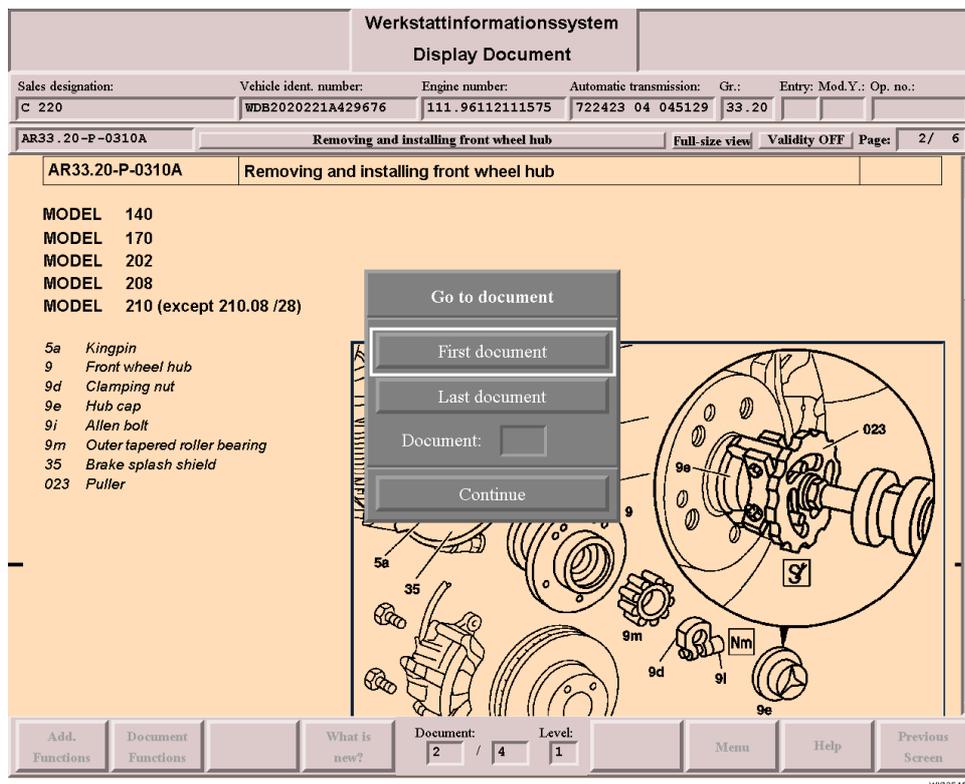


| **First document** | To go to the first document selected within the document selection list. |
| **Last document** | To go to the last document selected within the document selection list. |
| **Document** | To input a document number which is dependent on the number of documents selected within the document selection list. |
| | ℹ️ The total number of documents selected within the document selection list can be seen in the "Document/Level display". 📖 see section "6.2 Display Document". |
| **Continue** | • Closes the "Go to document" submenu or |
| | • Jumps to the corresponding document whose number was entered in the "Document" input box. |

## 7.2        Go to page

The "Go to page" submenu enables a direct move to a page within a document.
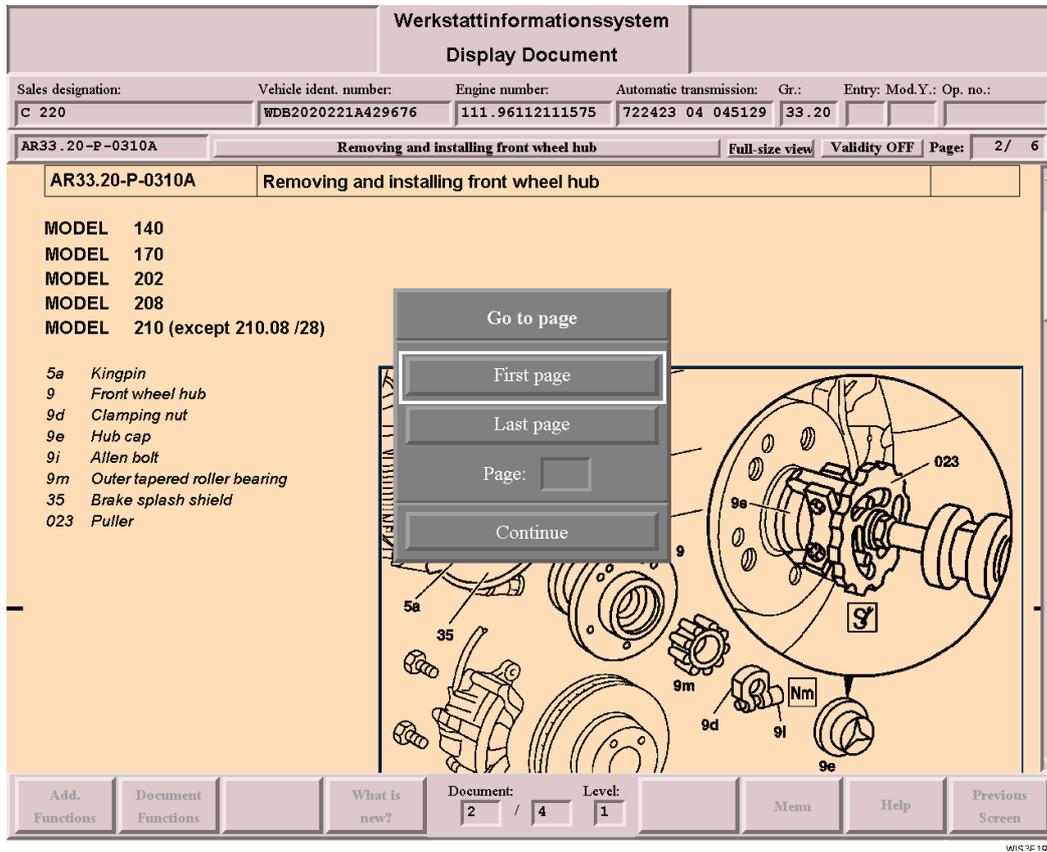


| First page | Goes to the "First page" in a document. |
|---|---|
| **Last page** | Goes to the "Last page" in a document. |
| **Page** | Jumps to the corresponding screen page whose page number has been entered in the "Page" input box. |

**Continue**
- Closes the "Go to page" submenu

or

- Jumps to the corresponding screen page whose page number has been entered in the "Page" input box.

## 7.3 Print

The "Print Functions" submenu enables a direct selection of the area of the document to be printed.

ℹ
- All information can be printed.
- A page break generally follows before or after a picture or on a table line.
- The number of screen pages is not identical to the number of pages printed.
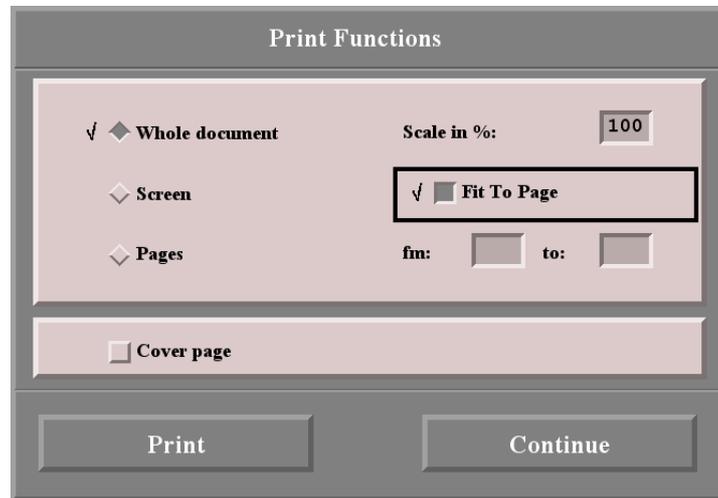


*"Print Functions" window when printing out a wiring diagram*

| | |
|---|---|
| **Whole document** | Prints the document from the first page to the last. |
| **Screen** | Prints the mask which can be seen on the screen. |
| **Pages** | Activates the "fm", "to" input boxes. |
| **Scale in %** | For entering a scale in %.<br>Example: If you wish to print out four pages with a scale of 100 %, the printout can be reduced to two pages if scaled to 50 %. The wiring diagram is then correspondingly smaller on the printout.<br>On the other hand, a very small wiring diagram can be shown three times larger on the printout with a scale of 300 %.<br>ℹ This function is only offered for printing out wiring diagrams. |
| **Fit To Page** | The wiring diagram is scaled in such a way that the entire wiring diagram is printed out on one page.<br>ℹ This function is only offered for printing out wiring diagrams. |
| **fm, to** | For entering specific page numbers. |
| **Cover page** | Prints in addition a cover page with the information: Name, user, document number, document title and validation.<br>ℹ With wiring diagrams, the legend for the wiring diagram is also printed. |
| **Print** | Opens the print option window.<br>📖 see section "7.3.1 Print option window". |
| **Continue** | Closes the "Print Functions" window. |

## 7.3.1    Print option window

After calling the Print Functions using "Document Functions/Print", a default Print option window is opened as well. This is to be used mainly for setting a portrait or landscape format.

The following settings are possible:

- Printer
- Paper size
- Page format
- etc.

(i)    It is assumed you have basic knowledge of Windows. The full functions of the Print option window can be found in the usual manuals.
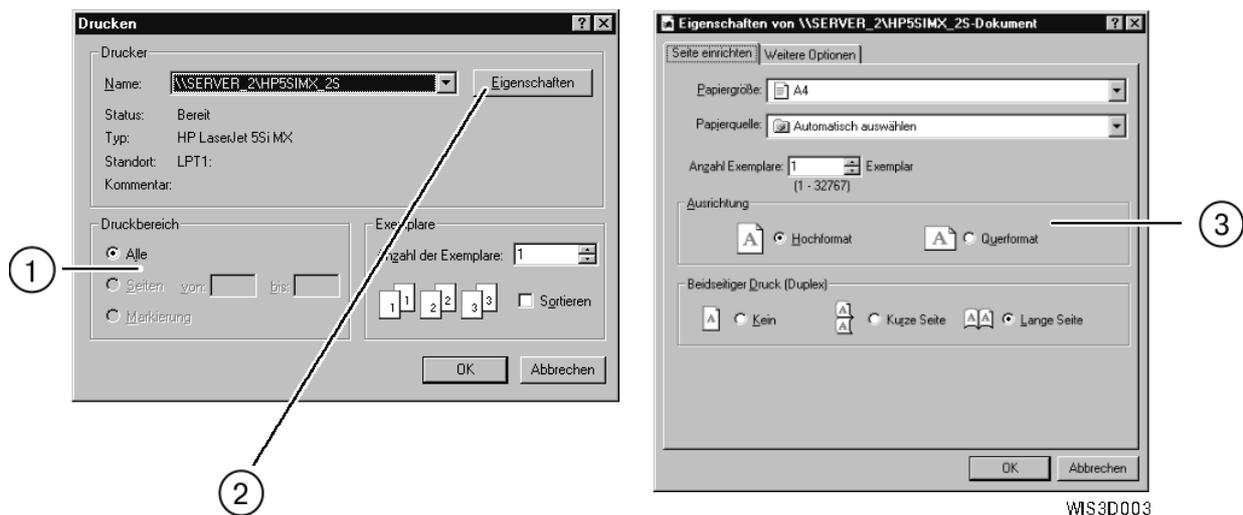


*The printer driver "HP5SIMX" has been used as an example.*
*The Print option window may look different depending on the printer driver being used.*

**An overview of the most important functions:**

① **Print range**          The setting "All" is always active and cannot be changed.

(i) Restriction to specific pages is set in the "Print Functions" WIS mask and has a limited function at the present time.

② **Properties**          Calls the properties for the printer selected.

③ **Alignment**          For setting the paper format desired (portrait or landscape).

(i)    •    If individual characters are not printed out as shown on the screen, make sure in the printer properties that True Type fonts have been loaded in the printer as soft font.

•    If the entire page is not printed, we recommend you reduce the graphics resolution until the whole page is printed correctly.

•    You must make sure that there are sufficient system resources available for the document and screen print. A graphics printout with a higher resolution may produce better quality pictures but may also lead to system errors if there are not enough system resources.

•    Please make sure of the following when setting a higher resolution:

–    The printer has sufficient main memory.

–    Workstation/Server have sufficient disk memory for temporary external files.

–    The workstation has sufficient main memory/virtual memory to be able to perform the graphics editing.

## 7.4 Reference

Calls the "Selection of references" document selection list.

- **For CASE 1 documentation:**
  In the "Selection of references" document selection list, further information on a topic is listed.
- **For CASE 2 documentation:**
  In the "Selection of references" document selection list, the document titles of the reference documents are listed from the entry table (e.g. work step table).

By selecting one or several document titles in the document selection list and the "Display" button, the documents can be displayed.



WIS3E196

| **Selection list** | Lists the individual document titles of the reference documents. One or several document titles can be selected. |
|---|---|
| **Validation** | Contains the validity of the document around which the selection frame is positioned. |
| **Revisions** | Contains information on the reason for the revision/revision date of the document around which the selection frame is positioned. |
| **Display** <br> ⌨ Alt + D | Displays the document selected in the document selection list. <br> ⓘ If several documents are selected, the corresponding documents are nested one behind the other and can be displayed using the "Document Functions". <br> 📖 see section "7 Document Functions". |
| **Stop** | Closes the "Selection of references" window. |

## 7.5        Legend on/off

The "Legend on/off" function is only available for the following types of information: Electrics wiring diagram (PE), Pneumatics wiring diagram (PP) and Hydraulics wiring diagram (PH). 📖 see section "6.4.3 Display Document Electrics/Pneumatics wiring diagrams".

Using the Document Functions, the wiring diagram legend can be hidden using the "Legend off" button which makes the area lying under the legend visible.

You can show/hide the legend using the key combination ⌨ Alt + **O**.

## 7.6        Search

When a search term or part of a term is entered, the document currently displayed on screen is searched. A word found during the search is highlighted blue. In "Document Functions", you can use the action buttons to "Search backward" (ALT+K) and "Search forward" (ALT+F) in the document.

ⓘ        The search is not case sensitive.
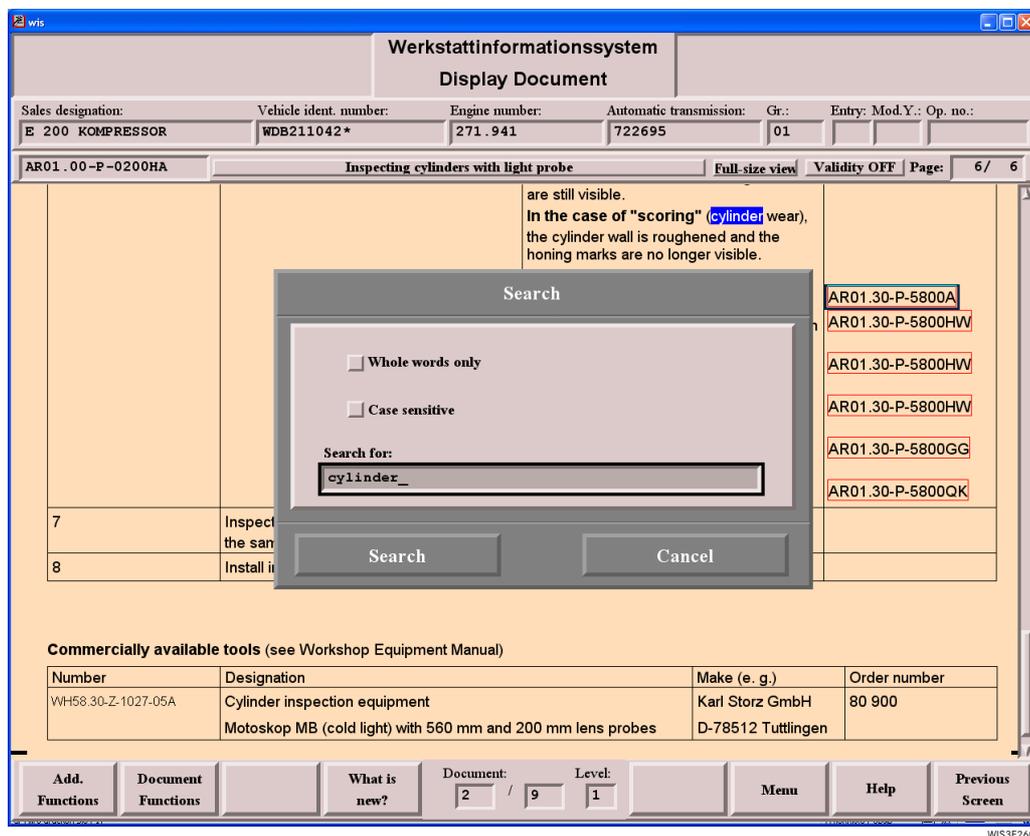


| Whole words only | When the "Whole words only" square is checked, the search is restricted to the search term entered in the "Search for" input box. |
| Case sensitive | When the "Case sensitive" square is checked, the search is restricted to the case entered in the "Search for" input box. |
| Search for | For entering the search term or part of a word. |
| Search | Starts the search within the displayed document. |
| Cancel | Closes the "Search" window. |

## 8          What is new?

The "What is new?" function button calls a submenu with action buttons.



WIS3E033

| | |
|---|---|
| **Changes/New** | Calls "Changes/New" <br> 📖 see section "8.1 Changes/New". |
| **Top News** | Calls "Top News" <br> 📖 see section "8.2 Top News". |
| **STI** | Calls "Survey of service technical information (STI)". <br> 📖 see section "8.3 STI (Service Technical Information)". |
| **ASRA** | Calls the  "Preface to ASRA". <br> 📖 see section "8.4 Preface to ASRA". |
| **Continue** | Closes the "What is new?" submenu. |

## 8.1 Changes/New

In "Changes/New", the document titles of the new and revised documents compared to the previous DVD edition are displayed.

Call of "Changes/New" is differentiated according to:

- **Context-independent (not model-related):**
  The context-independent display of "Changes/New" can only be made from the "Main Menu" mask.
  After calling "Changes/New", the document titles of **all** new and modified documents (for all vehicle types) are displayed.
- **Context-dependent (model-related):**
  The context-dependent display of "Changes/New" is dependent on the selections from "Infobox 1" and "Infobox 2".
  The display of the new and modified document titles is limited to the selection criteria selected in "Infobox 1" and "Infobox 2".



WIS3E152

| **Document code** | The following document codes are possible: | |
| --- | --- | --- |
| | **N = new:** | The document is new and on a DVD for the first time. |
| | **A = revisions:** | The document has been modified compared to the previous DVD edition. |

**Validation**  Contains the validity of the document around which the selection frame is positioned.

**Revisions**  Contains information on the reason for the revision / revision date of the document around which the selection frame is positioned.

**Display**  Displays the documents selected in the document selection list.
`Alt` + D

## 8.2 Top News

Under "Top News", document titles of documents are displayed which are viewed as **particularly noteworthy** for a specific period independent of the monthly DVD edition.

The corresponding documents have a limited period which means that these documents remain classified in the system as Top News despite the DVD update, until the respective "expiry date" has been reached. These document titles are then no longer displayed under Top News.



Werkstattinformationssystem
Top News

**Selection of Top News:**

| | Group | Veh. type | TI | Document title |
|---|---|---|---|---|
| T | 14.40 | CAR | si | Service Information: Introduction of diesel particulate filter |
| T | 18.00 | TRUCK | si | Service Information: Oil consumption measurement using STAR DIAGNOSIS |
| T | 18.20 | CAR | si | Service Information: Introduction of fleece oil filters |
| T | 25.20 | TRUCK | af | Clutch pedal sometimes sluggish |
| T | 26.45 | TRUCK | af | Flow noise and/or vibrations in PTO hydraulic lines |
| T | 27.00 | CAR | si | Service Information: Introduction of the 722.9 (7G-Tronic) automatic transmission |
| T | 27.60 | CAR | af | Engine cannot be shut off, selector lever locks in "P" |
| T | 27.60 | CAR | af | Selector lever remains in touch position (+ or -) and/or louver makes a noise |
| T | 29.10 | TRUCK | af | The clutch pedal does not return to the starting position after actuation, |

**Validation:** TRANSMISSION 715.5 in MODEL 950.###, 952.###, 953.###, 954.### ## up to 791915 with CODE (N56) Live PTO (NMV) i = 1.48 TRANSMISSION 715.5 in MODEL 950.###, 952.###, 953.###, 954.### ## up to 791915 with CODE (N57) Live PTO (NMV) i = 1.09'

**Revisions:** 07.07.03 - Contents completely revised. -

Display

Add. Functions          Menu          Help          Previous Screen

WIS3E271

| **Validation** | Contains the validity of the document around which the selection frame is positioned. |
|---|---|
| **Revisions** | Contains information on the reason for the revision / revision date of the document around which the selection frame is positioned. |
| **Display** Alt + D | Displays the documents selected in the document selection list. |

## 8.3  STI (<u>S</u>ervice <u>T</u>echnical <u>I</u>nformation)

ⓘ **Calling information using "What is new?/STI" is no longer current practice, because now that memos are no longer sent, STIP, STIN and STIV information has been removed and e-mail transmissions have been introduced (from 01/2002), this list of contents with the information already filed in WIS is no longer maintained.**

Since 01/2002, Service Technical Information (STI) has been sent via e-mail in the form of PDF files. The names of these PDF files incorporate the document number and a language indicator, e.g. SI98.00-P-0007A.d.pdf.

The PDF files are purely for the purpose of advance information, and should not be archived. The next time that WIS is updated, this information will be contained in WIS and can then be displayed in the following ways:

- By entering the **document number**
  - Enter the document number in the "Document Number" input field in "Infobox 1" and confirm with  R
    📖 see section  "5.1.4 Document number".
  - The document is displayed immediately.

- By **default search** in "Infobox 1" and "Infobox 2" using the information types "Fault finding" and "Service information".

- Using the **"Top News"** function
  All Service Technical Information (STI) sent via e-mail is made available in Top News for a period of 6 months. After this period, the documents can only be called by means of the default search.
  - Function key "What is new?".
  - Function key "What is new?".
  - Select desired vehicle type(s).
    📖 see section "8.2 Top News".

## 8.4 Preface to ASRA

In the "Preface to ASRA", document titles on current information is listed in a selection list. The "Preface to current version" document describes the changes of the current ASRA version and contains general information.



| | Werkstattinformationssystem |
| --- | --- |
| | Preface to ASRA |

Preface to ASRA:

Document title

Preface to current version

Display

| What is new? | | Menu | Help | Previous Screen |

WIS3E034
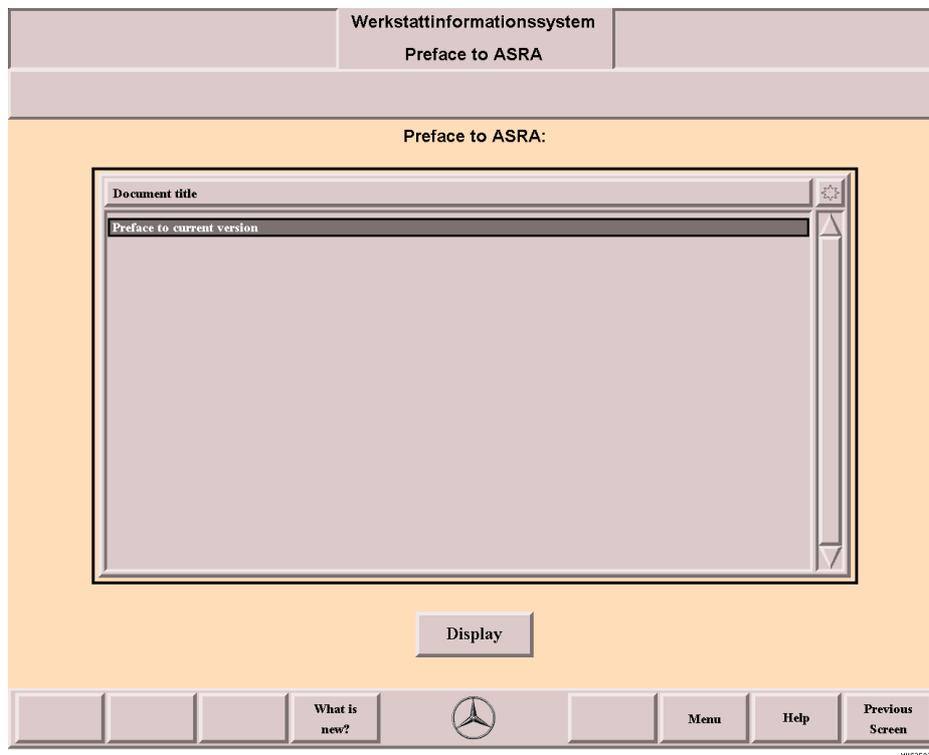
**Display**           Changes to the Document Selection.
[Alt] + D

# 9　　　　Directory – WIS table of contents

Using the WIS table of contents, without selecting a vehicle or unit, you can access information from "Infobox 1" which is assigned to the corresponding type of information (e.g. Maintenance and care = AP, Introduction into service = SN, ...). Depending on the type of information selected, the user is prompted step by step to the information desired.

ⓘ　　Selection criteria already made in "Infobox 1" is **not** taken into consideration during the search.



| Information type abbreviation | Information types | Notes | Reference |
|---|---|---|---|
| | **Fault reports** | | |
| | WIS, EPC, DAS, ASRA fault reports | | OF00.01-P-3001A |
| | **News** | | |
| SI | Service information | | SI00.01-Z-0999ZZ |
| SN | Introduction into service manuals | | SN00.01-Z-0999ZZ |
| SM | Service measures and instructions | | SM00.01-Z-0999ZZ |
| | **Work information** | | |
| AS | Safety information, overall table of contents | | AS00.01-Z-0999ZZ |
| AH | General information, quality information | | AH00.01-Z-0999ZZ |
| AP | Maintenance, care, emission testing, safety testing | | AP00.01-Z-0999ZZ |
| AF | Trouble diagnosis | | AF00.01-Z-0999ZZ |
| AD | Diagnosis | | AD00.01-Z-0999ZZ |
| AR | Testing and repair work | | AR00.01-Z-0999ZZ |
| AN | Retrofitting and conversion (special equipment) | | AN00.01-Z-0999ZZ |
| AZ | Retrofitting and conversion (accessories) | | AZ00.01-Z-0999ZZ |
| | **Basic knowledge** | | |
| GF | Functions | | GF00.01-Z-9999ZZ |
| GE | As-built configurations | | GE00.01-Z-8999ZZ |

| | | |
|---|---|---|
| **Information type abbreviation** | Contains the abbreviation of the corresponding information type.<br>e.g. AD = Diagnosis.<br>ⓘ An explanation of the logos used in the workshop documentation can be called using the "User Information" reference arrow. |
| **Information types** | Description of the information type. |
| **Notes** | This may contain additional information. |
| **Reference** | Reference information is displayed after selection.<br>📖 see section "2.4.11 Reference". |

## 10 Troubleshooting Symptoms

The "Troubleshooting Symptoms" mask supports the fast and direct diagnosis of complaints. After selecting criteria, a search is made through all documents of the information type "Work information Troubleshooting" (AF).

The square selection list is divided into 3 columns which are separated visually and divided into the following main points of complaint .:

| | | |
|---|---|---|
| **1st column:** | **How does the complaint occur?** | Criteria which are perceived by sense organs. |
| **2nd column:** | **By an/a particular ...** | Criteria referring to condition of vehicle/operation. |
| **3rd column:** | **dependent upon ...** | Criteria in connection with environmental conditions (weather, condition of road surface, outside temperature, ...). |

ℹ️ 
- The document search is always made through all function groups/subgroups.
- At least one criterion must be selected per column.

Selection of one criterion or several criteria per column means that only those documents are looked for which are assigned to the corresponding criteria. This results in the document search being restricted accordingly.

The more criteria selected per column, the larger the search result in the document selection.

**Search strategy recommendation:**

If a search does not lead to the desired result, then the boxes "all criteria affected" must be selected in columns 2 and 3. A new search must be started.

①   **How does the com-**      The document search is restricted according to the selection of one or several criteria.
     **plaint occur?**

| | |
|---|---|
| **optical (visible):** | e.g. control lights, folding top, seat cover, lights, scratch marks, loose, damaged, broken, bent, ... |
| **acoustic (audible):** | e.g. noise of any sort, poor radio reception, poor tone quality, ... |
| **acoustic and sensitive:** | only acoustic and sensitive together |
| **sensitive (perceptible):** | e.g. vibrations, build up of vibration, bucking, jerking when changing gear, wobbling, misfiring, ... |
| **odor:** | smell |
| **leaking:** | e.g. leaks, porous, perforated, ... |
| **legible/readable:** | e.g. error memory, codes, standard deviation, |
| **Malfunction or breakdown:** | e.g. fault, function failure, function impairment, ... |

②   **By an/a**               The document search is restricted according to the selection of one or several criteria.
     **particular ...**

| | |
|---|---|
| **Driving condition:** | e.g. starting, accelerating, braking, underload, full load, load alternation, forwards drive, reversing, downhill driving, parking, ... |
| **Driving condition and speed range:** | only driving condition and speed together. |
| **Driving condition and revolutions:** | only driving condition and revolutions together. |
| **Driving condition and operating conditions:** | only driving condition and operating conditions together. |
| **Driving condition, revolutions and operating conditions** | only driving condition, revolutions and operating conditions together. |
| **Speed range:** | e.g. in the range from 50 - 80 km/h. |
| **Revolutions:** | e.g. in the range from 3500 - 4200 1/min. |
| **Revolutions and operating conditions:** | only revolutions and operating conditions together. |
| **Operating conditions:** | e.g. starting procedure, cold start, warm start, warm-up phase, idling, engine standstill, coolant temperature, aggregate temperature, ... |

③   **dependent upon ...**    The document search is restricted according to the selection of one or several criteria.

| | |
|---|---|
| **Atmosphere influence:** | e.g. windy, foggy, rainy, snowfall, ... |
| **Atmosphere influence and Condition of road surface:** | only atmosphere influence and condition of road surface together. |
| **Atmosphere influence and Surrounding/Outside temperature:** | only atmosphere influence and surrounding/outside temperature together. |
| **Condition of road surface:** | e.g. rough, smooth, wet, dry, ... |
| **Surrounding/Outside temperature:** | e.g. engine oil temperature, coolant temperature, inside temperature, ... |
| **Fluids:** | e.g. oil, fuel, air, ... |

| ④ | **all criteria affected** | **All** the criteria for the column in question is activated/deactivated. |
| | | The document search is made using all the criteria of the column in question. |
| ⑤ | **not clearly assignable** | The criterion "not clearly assignable" is a separate criterion. It has to be selected if the troubleshooting symptom is not to be assigned to any of the listed criteria in the column in question. |
| ⑥ | **Sun** | To activate/deactivate **all** the list entries (criteria) for all the columns. |
| ⑦ | **Search** <br> Alt + S | Starts the literature search under the criteria selected in "Infobox 1" and "Troubleshooting Symptoms" and opens the "Document Selection" mask. |
| | | ⓘ "Search" is only active if at least 1 criterion has been selected per column. |

ⓘ  Multiple selection of individual criteria is possible within a column. All the criteria in a column is linked with "or". This means the search result compromises all the documents for which one of the criterion selected in a column applies.

Selection of combined criteria (e.g. acoustic and sensitive) in a column gives a different search result than the selection of individual criteria "acoustic (audible)" and "sensitive (perceptible)".

# 11          Damage Code

For determining the damage code in cases of warranty and expense down to the organization.
The "Damage Code" function can be called from the following masks:

• Infobox 1
• ASRA "Operation item list"

## 11.1          Damage Code 1

The corresponding picture title is displayed in the "Damage Code 1" mask by selecting function groups/function sub-
groups. The pictures are displayed in the "Damage Code 2" mask by selecting the desired picture title and the "Determine
Damage Code" action key. 📖 see section "11.2 Damage Code 2".

"Interpret damage codes" is displayed by selecting the "Interpret damage codes" action button.
📖 see section "11.3 Interpret damage codes".
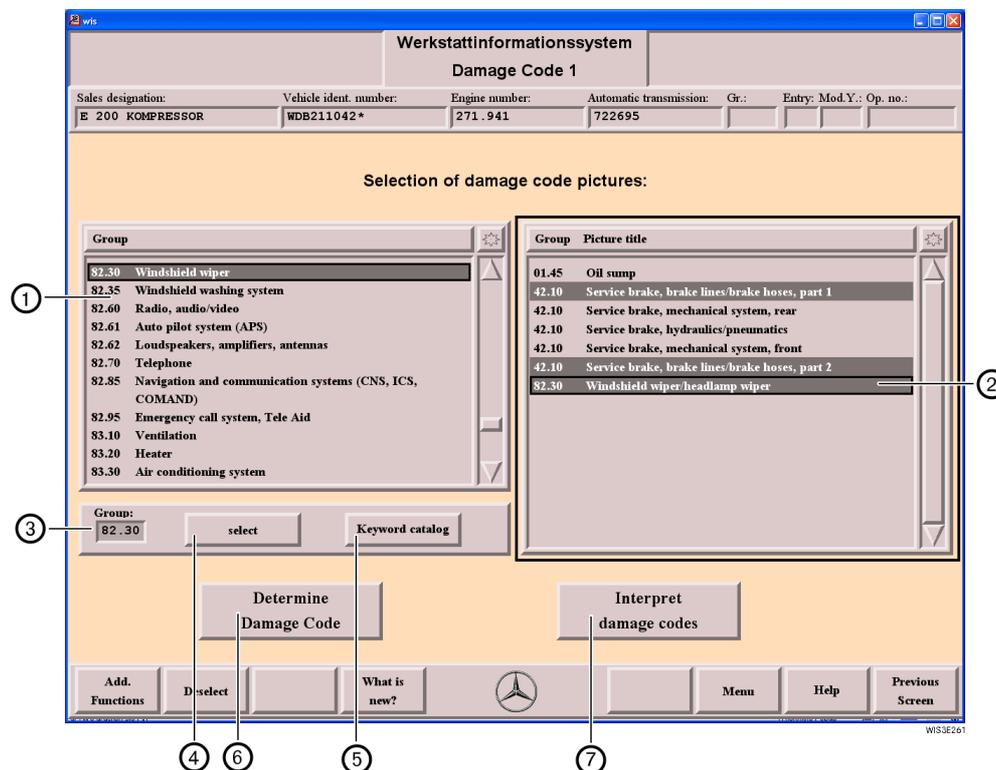


| | ① **Group** | For selecting the function group/function subgroup. |
|---|---|---|
| | | ℹ️ Multiple selection possible. Only groups relevant to the damage code are listed. |
| | ② **Group/Picture title** | To select the picture titles. |
| | | ℹ️ Multiple selection possible. |
| | ③ **Group** | For entering a function group, where applicable, in connection with a function subgroup. After pressing the ⎗Return⎘ key, the selection frame in the selection list moves to the function group/subgroup entered. |
| | | ℹ️ The group entered is active only after making a selection in the "Group selection list" ① or by selecting the "Select" ④ action button. |
| | ④ **select** | For confirming the entry from the "Group" input box. This leads to automatic selection of the function group/subgroup in the Group selection list. |
| | | ℹ️ "Select" is a toggle switch, it activates/deactivates the function group/subgroup entered in the "Group" input box ③. |
| | ⑤ **Keyword catalog** | Opens the "Keyword catalog" selection list for finding a keyword. |
| | | 📖 see section "5.2.1 Keyword catalog". |

⑥  **Determine Damage Code**  Opens the "Damage Code 2" mask. 📖 see section "11.2 Damage Code 2".
   ⬚Alt⬚ **+ D**

⑦  **Interpret damage codes**  Opens the "Interpret damage codes" mask. 📖 see section "11.3 Interpret damage codes".

## 11.2        Damage Code 2

Is used for the schematic coding of damages in cases of warranty and expense down to the organization, resulting in a damage code number.

ⓘ         The pictures are "representative" for all comparable vehicle types or units and components.
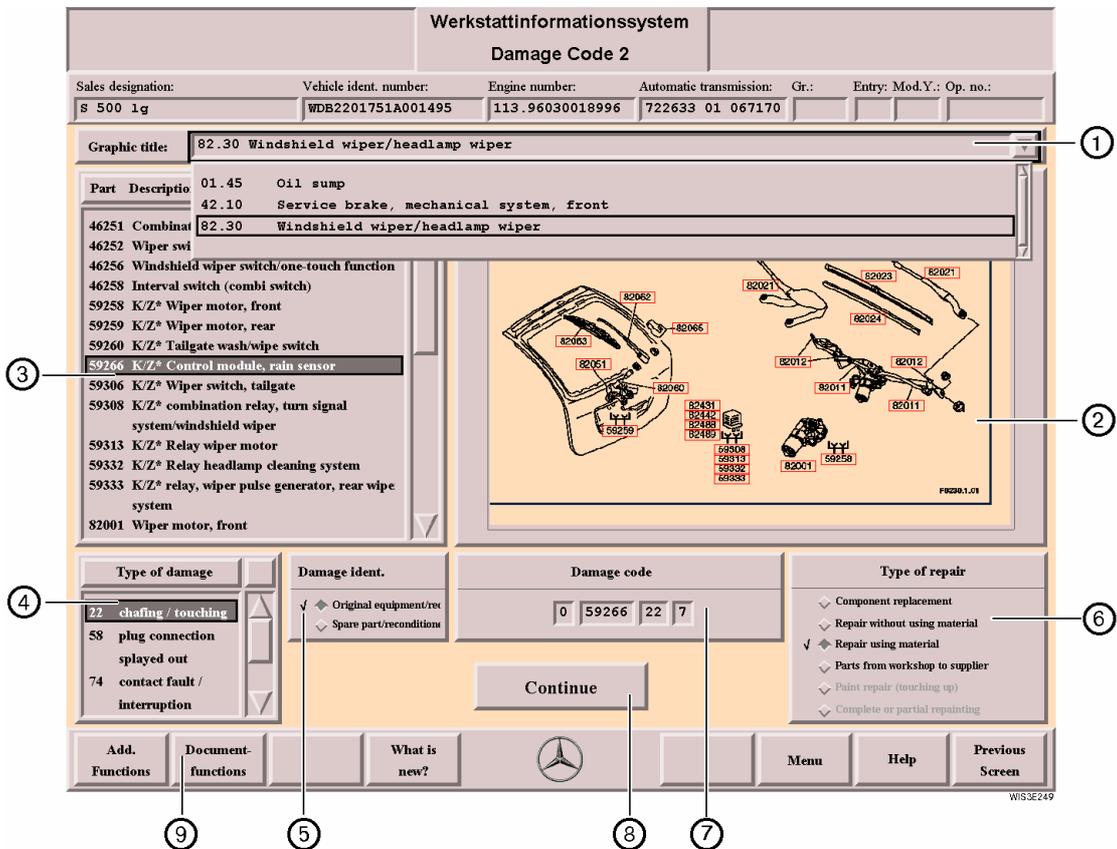


**To determine a damage code:**
- Selection of a damage code no. directly in the picture ② or
  by selecting the Part/Description ③ causing the damage
- Selection of the Type of damage ④
- Selection of a Damage ident. ⑤
- Selection of the Type of repair ⑥.
  - ⟹  Select the "Continue" ⑧ action button (WIS). Closes the "Damage Code 2" mask.
       Or
  - ⟹  Select the "Transfer" ⑧ action button (ASRA). The damage code is assigned to the operation item.

① **Graphic title**        Selecting the menu arrow opens a selection menu in which the selected damage code pictures are listed.

② **Picture display**       For selecting the number assigned to the part causing damage.
The digits (part) in front of the corresponding identification are copied to the Damage code box.
The corresponding description is selected in the Part/Description selection list for verification.

ⓘ The "Zooming in the picture" function is possible, whereby the numbers in the picture cannot then be selected, 📖 see section "6.5 Zooming in the picture".

③ **Part/Description**      For selecting the part **causing damage**.
The digits (part) in front of the corresponding description are copied to the Damage code box.

ⓘ If none of the damaged parts listed applies, you should select a neighboring damage part.

④ **Type of damage**       For selecting a Type of damage permanently assigned to the damaged part.
The digits in front of the corresponding description are copied to the Damage code box.

ⓘ If none of the damaged types listed applies, then the entry "** not definable" must be selected. The damage type is shown coded with asterisk.
In addition, the missing damage type or a reference to where this information can be found must be entered in the memo box of the warranty/goodwill claim.

⑤ **Damage ident.**        For selecting a damage identification.
The digits assigned are copied to the Damage code box.

A differentiation is made whether:

0 = Original equipment/rep
1 = Spare part/recondition

ⓘ After selecting a "Type of damage", the "Repair using material" position is selected as default.

⑥ **Type of repair**       For selecting the Type of repair.
The digits assigned are copied to the Damage code box.

ⓘ After selecting a "Type of damage", the "Repair using material" position is selected as default.

⑦ **Damage code**          Displays the damage code number determined.

⑧ **Continue**             **Together with "Infobox 1"**
Closes the "Damage Code 2" mask and returns to "Infobox 1".

**Transfer**           **Together with "ASRA"**
Transfers the damage code to the "Operation item list".
📖 see section "12.4 Operation item list".

⑨ **Document Func-         In "Damage Code 2", the "Document Functions" function button is also displayed which has the
tions**                following independent function:

**Next picture:**        If several damage code pictures have been selected, you can go to the
[Alt] + N               **next** picture.

**Previous picture:**    If several damage code pictures have been selected, you can go to the **pre-
[Alt] + P               vious** picture.

**Continue:**            Closes the "Document Functions" submenu.


ⓘ        **Explanation of the car damage code abbreviations ( K/L\*, K/Z\*, S/Z\*)**
K/L\* = coupling/fiber optical cable
K/Z\* = coupling/feed line
S/Z\* = connector/feed line

## 11.3 Interpret damage codes

A known damage code can be entered manually in the "Interpret damage codes" mask. WIS interprets this damage code automatically and uses this to determine the damaged part in question, the type of damage, the type of repair and the damage ident.

Werkstattinformationssystem

Interpret damage codes

| Sales designation: | Vehicle ident. number: | Engine number: | Automatic transmission: | Gr.: | Entry: | Mod.Y.: | Op. no.: |
| E 200 KOMPRESSOR | WDB211042* | 271.941 | 722695 | | | | |

Graphic title:

**Part   Description**

**Type of damage**

**Damage ident.**
√ ◆ Original equipment/re
◇ Spare part/recondition

**Damage code**
0

Continue

**Type of repair**
◇ Component replacement
◇ Repair without using material
◇ Repair using material
◇ Parts from workshop to supplier
◇ Paint repair (touching up)
◇ Complete or partial repainting

| Add. Functions | Document-functions | What is new? | | Menu | Help | Previous Screen |

WIS3E262

**Damage code**   Input box for entering a known damage code. The entries in the individual damage code boxes can be confirmed with Return or the ← → cursor key. After the damage code has been entered, the appropriate selection list is filled and the relevant elements (damaged part, type of damage, type of repair and damage ident.) are displayed.

   ⓘ  All other boxes in the mask are information boxes.

**Continue**   Closes the "Interpret damage codes" mask and returns to the "Infobox 1" mask.

**Previous Screen**   Closes the "Interpret damage codes" mask and returns to the "Damage code 1" mask.

## 12      ASRA

**ASRA**      Operation texts
              Standard texts
              Flat rates
              Work units

DaimlerChrysler AG creates operation items for repair work incurred in the workshops.
The operation items consist of operation texts and work units (Germany) or standard texts and flat rates (other countries).
ASRA is an electronic work units/flat rates catalog which enables fast and reliable enquiries about operation items, working hours and damage codes.
Data defined with ASRA is the basis for the generation of orders, invoices and warranty applications.
ASRA will gradually replace the use of microfilm.

**Data includes:**

- Operation texts or standard texts, "Includes" text, notes, preface to ASRA.
- Work units or flat rates
- Illustrations (sketches or diagrams of vehicle components)

**Licensing:**

The ASRA function is enabled by the WIS license key. A differentiation is made between the following licenses:

| License | Contents |
|---|---|
| **WIS/ASRA** | Workshop documentation, operation items, flat rates, damage code |
| **WIS** | Workshop documentation, damage code |
| **ASRA** | Operation items, flat rates, damage code |

## 12.1        Calling ASRA

ASRA can be called as follows:

- From the "Main Menu" (without vehicle context).
- From "Infobox 1", by entering or selecting the following criteria:
  – Input of a vehicle ident. number (14 - 17 digits), taking the World Manufacturer Code into consideration,
  – Input of a model number (3 - 6 digits),
  – Without input of vehicle data.
- From "ASSYST" to the "Additional work" mask.
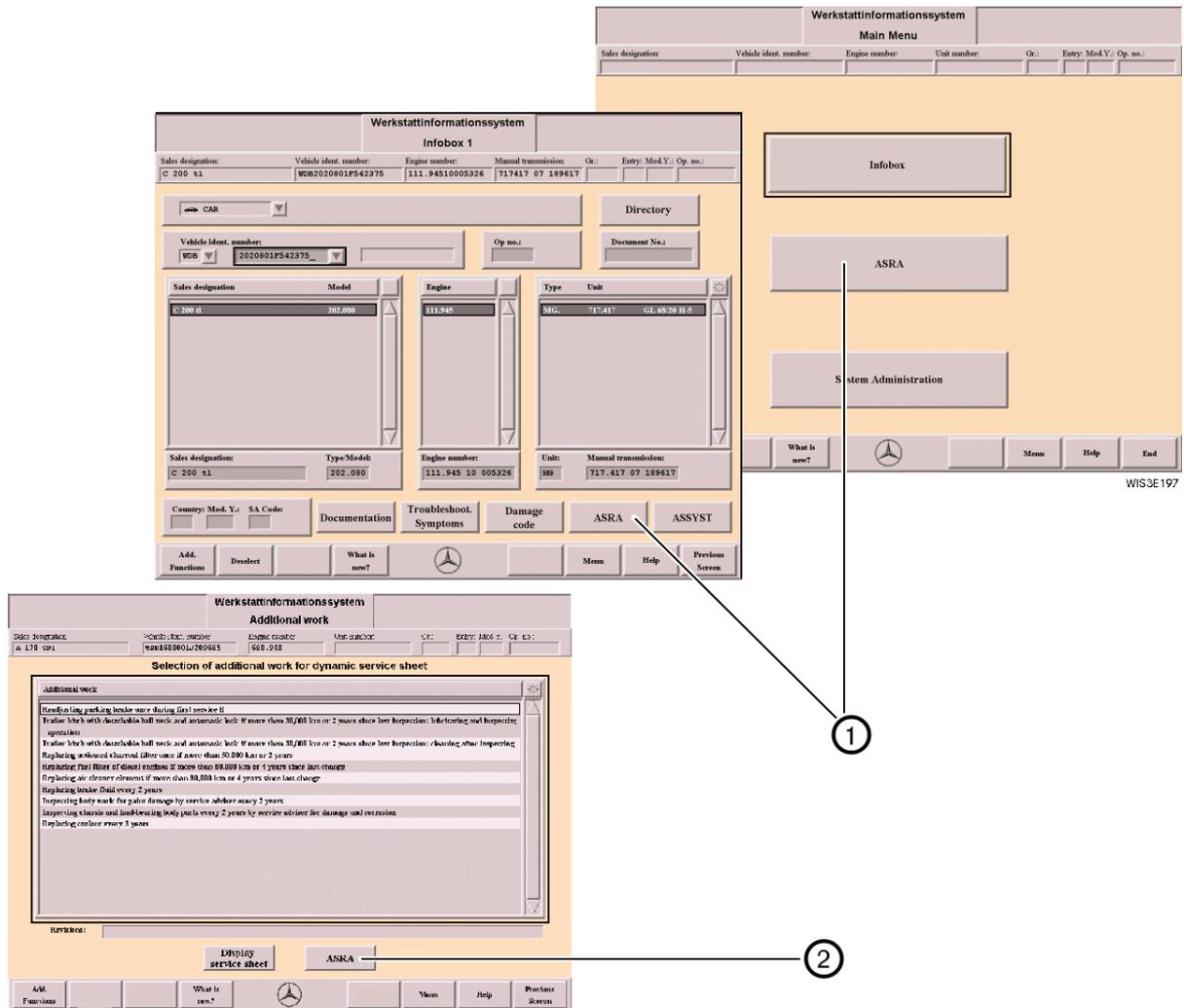


| | | Calls "ASRA Vehicle requirements".  📖 see section "12.2 ASRA Vehicle requirements". |
| ① | **ASRA** | |

| ② | **ASRA** | Calls the "Operation item list".  📖 see section "12.4 Operation item list". |

ⓘ The operation item for the scope of service defined in "ASSYST" and all selected additional work items are transferred to the operation item list.

## 12.2 ASRA Vehicle requirements

The vehicle and design group for the later selection of operation items are defined in "ASRA Vehicle requirements".

The vehicle context is defined using the vehicle ident. number or the vehicle type, family and model code.

ℹ️ A vehicle context selected in "Infobox 1" is transferred to ASRA and can be modified in the "ASRA Vehicle requirements" mask.



| ① | **World Manufacturer Code** | The world manufacturer code can be defined as follows: |

- If you select the menu arrow, a menu is opened which lists the individual world manufacturer codes (e.g. WDB, 4JG,...).
- If you enter a 17 digit vehicle ident. number in box ②, the world manufacturer code is entered automatically in box ①.
- If you change from "Infobox 1" or "ASSYST" to ASRA, the vehicle definition entered there is transferred automatically to "ASRA".
- If the world manufacturer code set does not match the vehicle type, the correct world manufacturer code is set automatically. If there are several available, a pop-up menu is displayed for selection.

ℹ️ When you end WIS, the last setting for the world manufacturer code is saved and shown again automatically when you restart WIS.

📖 see section "5.1.1 Overview of World Manufacturer Codes".

| ② | **Vehicle ident.**<br>**number input box/**<br>**selection menu** | The following inputs/selections are possible: |
|---|---|---|

        • Input of a vehicle ident. number (14 or 17 digit). The input must be concluded with `Return`.

        • After entering the first 3-5 digits of the vehicle ident. number and `Return` the "Model designation survey" is opened for selecting a type code (6 digit type model).
           📖 see section "12.2.1 Model designation survey".

        • Input of a type model (6 digits). The input must be concluded with `Return`.

        • **History function**
           If you select the menu arrow, a menu is opened in which the last 30 entries are highlighted for selection. These entries (type, model or vehicle ident. number) can also be accessed in the EPC using the `F3` function key.

             ⓘ The world manufacturer code is also highlighted so that a differentiation of the same type models with different world manufacturer code is possible.

| ③ | **Vehicle type** | If you select the menu arrow, a menu is opened in which the individual vehicle ranges are listed. A vehicle type comprises several families. |
|---|---|---|

        🚗      Car

        🚙      Cross-country vehicles (GW)

        🚐      Light transporters

        🚐      Heavy-duty transporters

        🚚      Truck

        🚌      Bus

        🚜      Unimog

        🚗      Smart

        ⓘ The displayed range of possible vehicle types depends on the license.

| ④ | **Family** | For selecting a vehicle family. A vehicle family contains several vehicle models. |
|---|---|---|

        Selection/input options:

        • Input of the family e.g. 19 `Return`

        • Selection of the menu arrow and selection in the menu.

        ⓘ The family is active if the vehicle type has been selected.

| ⑤ | **Model code** | For selecting a model code (vehicle model). |
|---|---|---|

        Selection/input options:

        • Input of the model code e.g. 31 `Return`

        • Selection of the menu arrow and selection in the menu.

        ⓘ The model code is active if the vehicle type and family have been selected.

| ⑥ | **Design group** | For selecting a design group. |
|---|---|---|

        ⓘ Only single selection possible.

        Selection/input options:

        • Input of the 2 digit design group number e.g. 72 `Return`

        • Selection of the menu arrow and selection in the menu.

| ⑦ | **Op. No.** | For entering an operation number (6 digits). |
|---|---|---|

ⓘ The input box is only active if the vehicle context (vehicle ident. number, or vehicle type, family, model number) has been selected.
If the operation number entered does not exist, a corresponding error message is displayed.

Selection/input options:

- Input of the operation number e.g. 002000 [Return]
  (The first two digits correspond to the design group).
  ⇒ The operation item is displayed in the "Operation items" mask with all additional work. 📖 see section "12.3 Operation items".
    ⓘ If no additional work exists, the operation item is transferred directly to the operation item list.
    📖 see section "12.4 Operation item list".

| ⑧ | **Notes**<br>[Alt] + N | Refers to technical characteristics relating to the design group selected.<br>📖 see section "12.2.2 Notes". |
|---|---|---|

ⓘ The Notes box is active if a design group has been selected.

| ⑨ | **Customer request** | For entering any text (max. 50 characters). The text is marked in the "Operation item list" with a "**I:**". |
|---|---|---|

ⓘ Input of any number of customer requests is possible. After acknowledging a customer request with [Return] the customer request is transferred to the operation item list and the input box is cleared so that another customer request can be entered, if necessary.
📖 see section "12.4 Operation item list".

| ⑩ | **Contents of design groups** | Entries in this list refer to the design group selected. Only those entries are displayed for which operation items exist. |
|---|---|---|

ⓘ Multiple selection is possible.

After selecting the title "Contents of design groups", the selection list is **sorted**. The title corresponds to a toggle switch:

- Alphabetically
- According to the entry number (entry number = the number of the first operation item in a subgroup)

| ⑪ | **Pictures** | For selecting the title of a picture. |
|---|---|---|

| ⑫ | **Picture** | Calls the "Picture" mask. 📖 see section "12.2.3 Picture". |
|---|---|---|

ⓘ The "Picture" action button is active if a picture title has been selected in the "Pictures" list.

| ⑬ | **Operation items**<br>[Alt] + O | Calls the "Operation items" mask for selecting the operation items required for the operation.<br>📖 see section "12.3 Operation items". |
|---|---|---|

ⓘ The "Operation items" action button is active if the vehicle context, a design group and an entry in the Contents of design groups have been selected.

| ⑭ | **Keyword search** | Calls up the "Keyword search", to look for component names.<br>📖 see section "12.2.4 Keyword search". |
|---|---|---|

| ⑮ | **Retrieve** | Calls up the "File overview" for renewed call of a file which has already been saved.<br>📖 see section "12.2.5 File overview". |
|---|---|---|

| ⑯ | **Delete** | Deletes all selections in the "ASRA Vehicle requirements" mask. |
|---|---|---|

### 12.2.1 Model designation survey

The "Model designation survey" is displayed if ASRA is unable to identify a vehicle clearly.
By selecting an entry in the "Model designation survey" and the "Select" action button, the model desired is defined with range, family and model code and entered in the "ASRA Vehicle requirements".

ⓘ **You must observe the following:**

The more detailed the vehicle entry is made in the "Vehicle ident. number" input box, the better the vehicle selection which can take place.

**Example:** The model series 124 is assigned dependent on the vehicle ident. number or the production period of various families (08, 11). The vehicle ident. end number, engine numbers and sales designations must be taken into consideration during the selection.

```
                    Werkstattinformationssystem
                    ASRA Vehicle requirements

Sales designation:        Vehicle ident. number:      Vehicle type:   Family:        Model code:         Design group:
                          WDB124

Vehicle ident. number:              Vehicle type:          Family:                      Model code:
  WDB     124
                            Model designation survey
```

| Range | Family | Model code | Mod. / eng. no. | Prod. from / to | Sales designation |
|---|---|---|---|---|---|
| P.C. | 08  124 (up to 09/92) | 11 200 D | 124120  601912 | 000001  003392 | 200 D |
| P.C. | 08  124 (up to 09/92) | 11 200 D | 124120  601912 | 000001  859136 | 200 D |
| P.C. | 08  124 (up to 09/92) | 11 200 D | 124120  601912 | 000001  999999 | 200 D |
| P.C. | 08  124 (up to 09/92) | 12 250 D | 124125  602912 | 000001  003392 | 250 D |
| P.C. | 08  124 (up to 09/92) | 12 250 D | 124125  602912 | 000001  859136 | 250 D |
| P.C. | 08  124 (up to 09/92) | 12 250 D | 124125  602912 | 000001  999999 | 250 D |
| P.C. | 08  124 (up to 09/92) | 13 300 D | 124130  603912 | 000001  859136 | 300 D |
| P.C. | 08  124 (up to 09/92) | 13 300 D | 124130  603912 | 000001  999999 | 300 D |
| P.C. | 08  124 (up to 09/92) | 14 300 D 4-Matic | 124330  603913 | 000001  999999 | 300 D 4-MATIC |
| P.C. | 08  124 (up to 09/92) | 15 300 D Turbo | 124133  603960 | 000001  859136 | 300 DT |
| P.C. | 08  124 (up to 09/92) | 15 300 D Turbo | 124133  603960 | 000001  999999 | 300 DT |
| P.C. | 08  124 (up to 09/92) | 16 300 D Turbo 4-Matic | 124333  603963 | 000001  859136 | 300 DT 4-MATIC |

```
        Select                                    Cancel

    Operation items          Keyword search              Picture

 Retrieve   Delete        What is          ⊛          Menu    Help    Previous
                          new?                                         Screen
                                                               WIS3E213
```

**Select** The vehicle context selected is transferred to the "ASRA Vehicle requirements".

**Cancel** Closes the "Model designation survey" mask and returns to the "ASRA Vehicle requirements" without any selection being made.

## 12.2.2    Notes

The Note refers to technical characteristics relating to the design group selected, e.g. which work applies in the design group selected.

ⓘ          The "Notes" action button is active if a design group has been selected.



**Print**          Calls the Print option window for printing out the Note.
Besides the Note itself, the printout also contains the current vehicle context, comprising the type, family, model code, design group and operation number.
📖 see section "7.3 Print".

**Continue**      Closes the "Notes" mask.

## 12.2.3 Picture

After selecting a sensitive box in the picture, the assigned entry is selected in the Contents of design groups.



| | Werkstattinformationssystem | |
| | **Picture** | |

| Sales designation: | Vehicle ident. number: | Vehicle type: | Family: | Model code: | Design group: |
| C 200 T | WDB2020801F542375 | CAR | 12 202 C Class | 52 C 200 T | 72 Doors |

| Picture | Contents of design groups | Operation items |
| Components in door, quarter window, wind-up window, trim pieces | **Door trim panel** | Picture notes |
| Components of door, window openers, door trim, door handle | Door trim molding | |
| | Quarter window trim molding | |
| T Model, components of rear doors | Door pocket | |
| | Armrest | |

| Delete | What is new? | | Menu | Help | Previous Screen |

WIS3E215

| **Picture** | Each picture is clearly assigned to a vehicle family and a design group. A picture contains sketches or diagrams of vehicle components and sensitive boxes. |
| **Sensitive boxes** | The sensitive boxes are marked by a **red** border. After selecting the sensitive box or an entry in the "Contents of design groups", the senstive box is shown in green.<br>ⓘ The sensitive boxes are "toggle switches".<br>A multiple selection is possible. |
| **Picture** | For selecting the picture title desired. |
| **Contents of design groups** | The entries in this list refer to the design group selected. Only those entries are displayed for which operation items exist.<br>ⓘ A multiple selection is possible.<br>After selecting the title "Contents of design groups", the selection list is **sorted**. The title corresponds to a toggle switch:<br>• Alphabetically<br>• According to the entry number (entry number = the number of the first operation item in a sub-group). |
| **Operation items** | Calls the "Operation items" mask for selecting the operation items required for the operation.<br>📖 see section "12.3 Operation items".<br>ⓘ "Operation items" is active if a sensitive box has been selected in the picture or an entry selected in the Contents of design groups. |
| **Picture notes** | Explanatory text on the pitcture. The picture note can be printed out if required. |
| **Delete** | Deactivates the selection in the "Contents of design groups" list. |

## 12.2.4    Keyword search

The "Keyword search" offers a search mechanism which determines the design group assosciation to the component name.

**Please note the following when using the "Keyword search":**

- Input of the search term or part of it (e.g. engine). Uppercase or lowercase letters possible.
- Return
- The term found first is shown selected in the list.
- You can go through the terms found using Return or by selecting the corresponding search arrow.
- ⇒ "The "Select" action button transfers the design group/subgroup and changes to the "Operation items" mask.
  📖 see section "12.3 Operation items".



WIS3E216
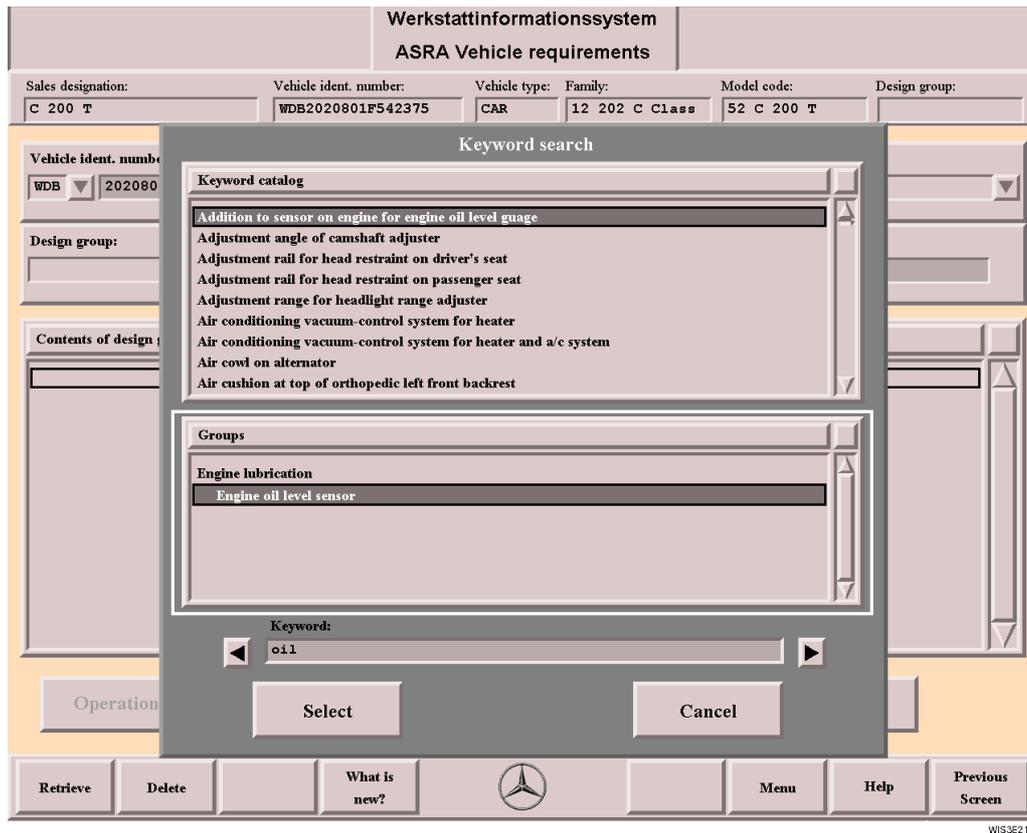
| | |
|---|---|
| **Keyword catalog** | For displaying or selecting component names which are assigned to a design group/subgroup. The "Keyword catalog" is listed alphabetically. |
| **Groups** | This information box shows the design group/subgroup affiliation depending on the term selected in the keyword catalog. The design subgroups are indented. |
| **Keyword** Return | For entering the search term or part of it. The search is started by Return and the term found is shown selected. |
| **Search arrow** | If serveral terms or parts of them are identical to the search term, after the search has been started you can move backwards and forwards within the "Keyword catalog" selection list using the search arrows. |
| **Select** | Closes the "Keyword search" and transfers the selected design group/subgroups and changes to the "Operation items" mask.. 📖 see section "12.3 Operation items". |
| **Cancel** | Closes the "Keyword search". |

## 12.2.5 File overview

The "Operation item lists" saved are listed in the "File overview". You can select and retrieve the file desired for further editing. The file retrieved contains the vehicle context saved and the operation item list with all operation items saved.

The operation item lists are always saved locally. To retrieve an operation item list which has been saved on another workstation (Client) you can access files saved locally in the entire network using "Change client".



WIS3E217
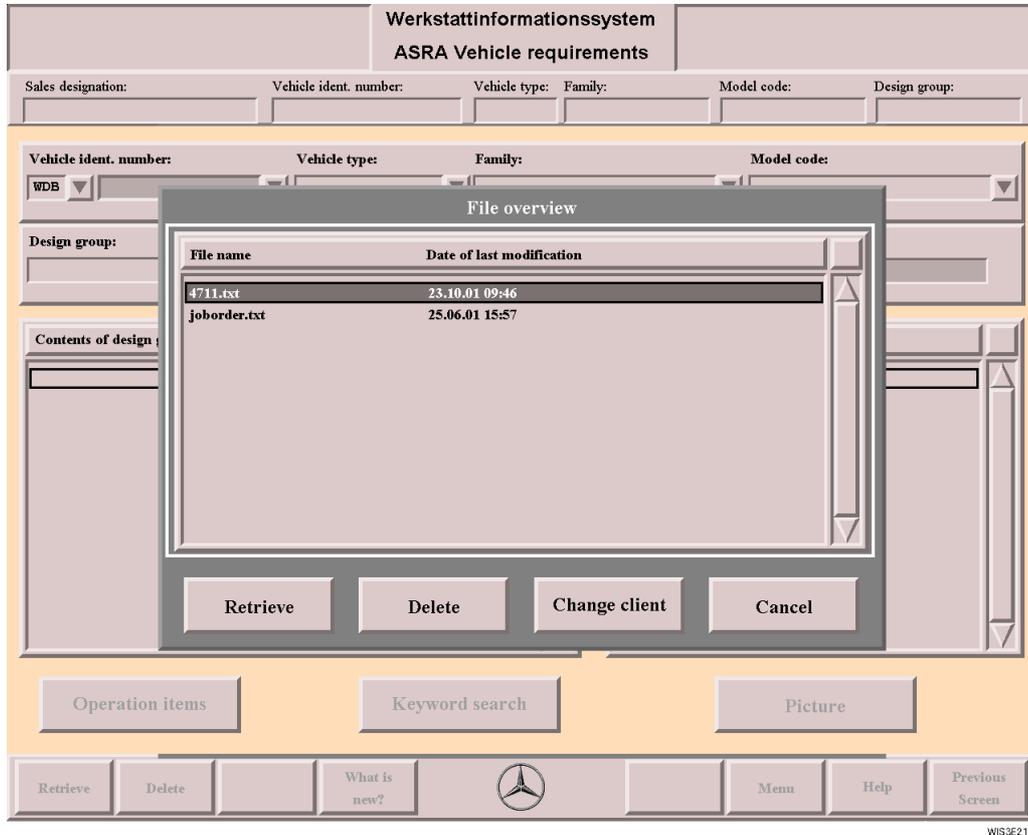
| File overview | For selecting the operation item list saved which is to be retrieved. | |
|---|---|---|
| | **File name** | File name of the operation item list saved. |
| | **Date of last modification** | Shows the date on which the operation item list was saved last. |

**Retrieve**
The file selected is retrieved in ASRA with the vehicle context saved and operation items.

ⓘ The retrieval is only active if a filename has been selected.
If a newly created vehicle context with operation items has **not yet been saved**, when a file already saved is retrieved, the pop-up menu "Save operation item list" is called as verification inquiry. 📖 see section "12.4.2 Save operation item list?".

**Delete**
Deletes the file selected.

**Change client**
Client = workstation available in the network.
Displays the clients available in the network in the "File overview". The "Retrieve" and "Delete" action buttons are not activated.

After selecting the Client desired, the filenames saved on the client are displayed in the "File overview".

**Cancel**
The "File overview" is closed.

## 12.3 Operation items

In the "Operation items" mask, those entries for the operation items to be carried out are marked which are to be transferred to the "Operation item list".

**Selection/input options:**

- Selection of the operation item desired in the list.
- Selection of the "Select" action button.
    ⇒ All operation items marked with * are transferred to the "Operation item list".

In the selection list, a differentiation is made between basic work and related work. Each operation item can be assigned one or several additional work items (Z), an Includes text (U) and a Note (H).

If an operation item is marked with **Z** (additional work), the additional work can be shown/hidden by the Additional work (Z) action button.

Vehicle-specific workshop documentation for a selected operation item can be displayed with the "Literature" action button.



**Design group**     For selecting a design group.

ⓘ Only single selection possible.

Selection/input options:

- Input of the 2 digit design group e.g. 72 [Return]
- Selection of the menu arrow and selection in the menu

| | |
|---|---|
| **Op. no.** | For entering an operation number (6 digits). |
| | ⓘ  If the operation number entered does not exist, a corresponding error message is displayed. |
| | Selection/input options: |
| | • Input of the operation number e.g. 002000 ⎡Return⎤ <br> (The first two digits correspond to the design group). |
| | ⇒ The operation item is displayed in the "Operation items" mask with all additional work. 📖 see section "12.3 Operation items". |
| | ⓘ If no additional work exists, the operation item is transferred directly to the operation item list. 📖 see section "12.4 Operation item list". |
| **Notes** | Refers to technical characteristics relating to the design group selected. <br> 📖 see section "12.2.2 Notes". |
| | ⓘ The Notes box is active if a design group has been selected. |
| **Customer request** | For entering any text (max. 50 characters). The text is marked in the "Operation item list" with "**I:**". |
| | ⓘ Input of any number of customer requests is possible. After acknowledging a customer request with ⎡Return⎤ the customer request is transferred to the operation item list and the input box is cleared so that another customer request can be entered if necessary. |
| | 📖 see section "12.4 Operation item list". |
| **Contents of design groups** | Entries in this list generally refer to the design group selected. Only those entries are displayed for which operation items exist. |
| | Selection/input options: |
| | • Selection of the menu arrow and selection in the menu. |

| | |
|---|---|
| **Selection list** | ⓘ Only single selection possible. |
| | * To be set using the "Select" action button. <br> All operation items marked with * are transferred to the "Operation item list". 📖 see section "12.4 Operation item list". |
| | **DG** Design group (2 digits) |
| | **No.** Number (4 digits) |
| | **Line** Line number (2 digits). Information on the warranty application. |
| | **WU or** **WU**: Work unit (standard time value) (3 digits) (1 WU = 5 minutes) or |
| | **Hours** **Hours**: Decimal hours e.g. 1.5 (0.1 hours = 6 minutes) |
| | ⓘ The work unit WU or Hours can be set in the "System Configuration" mask. 📖 see section "16.1 System Configuration". |
| | **ZUH:** Displays whether additional work **Z**, an Includes text **U** or Note **H** is available for this operation item. All combination options of Z, U, H are possible. |
| | **Operation text** Describes in brief the activity to be carried out on the corresponding component with information on repair and model/equipment combination. |

| **Left margin:** | **Basic work:** |
| | This is a complete work procedure which in addition to the amount of work on the object also contains all other activities. |
| | To recognize this as basic work, the text is displayed at the left margin in the selection list. |
| **First indent:** | **Related work:** |
| | Related work is carried out in connection with other work. This may mean that the extent of the related work can only be defined after a part or unit has been dismantled. |
| | To recognize this as related work, the text is indented once in the selection list. |
| **Second indent:** | **Additional work:** |
| | This is an activity assigned to an operation item. The model/eqiupment combintaion must be taken into consideration. |
| | To recognize this as additional work, the text is indented twice in the selection list. |
| **ZM** | Time specified by foreman |
| | For operation items marked with ZM and which are transferred to the "Operation item list", a time specified by the foreman can be made in the "Operation item list" mask. |
| | 📖 see section "12.4 Operation item list". |
| | ⓘ Whether a user can overwrite a standard time value depends on the system configuration. 📖 see section "16.1 System Configuration". |
| | Not all ZM positions have to be overwritten. Some are used as a guide for the mechanic. |

| **Operation item** | Consisting of operation number (6 digits), line number, WU or decimal hour and the operation text. |
| **Operation item list** `Alt` **+ O** | Changes to the "Operation item list" mask. All operation items marked with * are transferred to the "Operation item list". |
| | 📖 see section "12.4 Operation item list". |
| | ⓘ An operation item can only be transferred once to the "Operation item list". |
| **Select** `Alt` **+ S** | Sets/deletes the marking of * in front of the operation item selected. All operation items marked with * are transferred to the "Operation item list". |
| | ⓘ "Select" is a toggle switch. |
| **Additional work** `Alt` **+ Z** | A **Z** in the list shows that there is additional work for this operation item. Additional work is work which has to be carried out depending on the model and equipment. |
| | ⓘ The "Additional work" action button is active if an operation item marked with **Z** has been selected. |
| | "Additional work" is a toggle switch. The additional work can be shown/hidden in the selection list. |
| **Notes** `Alt` **+ H** | An **H** in the selection list shows that there is a Note on this operation item. |
| | Notes refer to the operation item selected. |
| | ⓘ The "Notes" action button is active if an operation item marked with **H** has been selected. |
| **Includes text** `Alt` **+ U** | A **U** in the selection list shows that there is an "Includes" text for this operation item. |
| | If there are other main steps in an operation item, these are described in the "Includes" text. |
| | 📖 see section "12.3.1 Includes text". |
| | ⓘ The "Includes text" action button is active if an operation item marked with **U** has been selected. |

| Literature | • | **Workshop documentation available:** |
| Alt + L | | Changes to "Document Selection". |
| | | 📖 see section "12.4.4 Document Selection together with ASRA". |

• **No workshop documentation available:**
Calls "Infobox 2" for individual document search.

• **Vehicle cannot be clearly identified:**
Calls the Model designation survey for clear vehicle requirements.

    ⓘ   Even if you enter a vehicle ident. number, ASRA only uses the ASRA vehicle context (range/family/model code) for the search and tries to match this with the WIS vehicle requirements. This may lead to ambiguity making a selection in the "Model designation survey" necessary.

### 12.3.1    Includes text

If there are several suboperations in an operation item, these are described in the "Includes" text. The "Includes" text gives information on the steps included in the time specified.
"Does not include" refers to work not included in the time specified.

```
                    Werkstattinformationssystem
                         Operation items

Sales designation:        Vehicle ident. number:   Vehicle type:  Family:        Model code:      Design group:
C 200 T                   WDB2020801F542375        CAR            12 202 C Class  52 C 200 T       05 Camshaft, va

        Fan and fan shroud - remove and install
        Remove, install chain tensioning device
        Camshaft(s) - Remove and install
        Unpack elements

        Does not include:
        Hydraulic valve adjusters - Check




                         Print          Continue



              What is                              Menu    Help   Previous
              new?                                                Screen
                                                                        WIS3E218
```

| Print | Calls the Print options window for printing the Includes text. |
| | Apart from the Includes text, the printout includes the current vehicle context, consisting of range, family, model code, design group and operation number. |
| | 📖 see section "7.3 Print". |
| Continue | Closes the Includes text option. |

## 12.4 Operation item list

Operation items required for carrying out the workshop order are listed in the "Operation item list", where necessary with customer request and damage code.

The time defined for the workshop order (in WU or Hours) can be seen in the "Total" box.

In the "Overwrite ZM value" input box the corresponding time value (in WU or Hours) can be entered for operation items which require a time specified by the foremen.

ⓘ   Whether a user can overwrite a ZM value depends on the system configuration.
📖 see section "16.1 System Configuration".

**Sorting operation items:**

The operation items can be moved within the Operation item list using the "Up" and "Down" action buttons which enables sorting. When sorting the operation items, you should take the logical sequence of the operation items into consideration. The customer request "I:" can also be sorted (moved).

ⓘ   The "Operation item list" can be printed and saved as a file.
📖 see section "12.4.1 Printout of the operation item list".
📖 see section "12.4.2 Save operation item list?".



| Selection list | **DG** | Design group (2 digit) |
| | **No.** | Number (4 digits) |
| | **Line** | Line number (2 digits). Information for the warranty application. |
| | **WU or** | **WU:** Work unit (3 digits) (1 WU = 5 minutes) or |
| | **Hours** | **Hours:** Decimal hours e.g. 1.5 (0.1 hours = 6 minutes) |

ⓘ The work unit WU or Hours can be set accordingly in the "System Configuration" mask.
📖 see section "16.1 System Configuration".

| | | |
|---|---|---|
| | **ZM** | Time specified by foreman |

**ZM**       Time specified by foreman

A time must be specified by the foreman for operation items marked with ZM.

ⓘ Whether a user can overwrite a work unit depends on the system configuration.
    📖 see section "16.1 System Configuration".
Not all ZM positions have to be overwritten. Some are used as a guide for the mechanic.

**!**       Shows that the ZM value has been overwritten.

**I**       **Customer request**:
Information entered manually in the "ASRA Vehicle requirements" and which provides the mechanic with information on the operation items selected.

ⓘ Customer requests can also be sorted (moved).

**Operation text**       Describes in brief the activity to be carried out on the corresponding component with information on repair and model/equipment combination.

**Total**       Depending on the setting, displays the total in work units (WU) or decimal hours (Hours).

ⓘ The work unit WU or Hours can be set accordingly in the "System Configuration" mask.
    📖 see section "16.1 System Configuration".

**Overwrite ZM value**       To overwrite an operation item marked with ZM with WU or Hours.

ⓘ Whether a user can overwrite a ZM value depends on the system configuration.
    📖 see section "16.1 System Configuration".

The foreman has to define and specify work units for procedures for which the time required has not been assigned by work studies. This also applies for work for which no values have been defined or work which deviates from the extent of work specified.

Selection/input options:

- Selection of an operation item marked with ZM (time specified by foreman).
- Delete the letters ZM in the input box with 🔙 (return key) or ⌨Shift + ⌨Del .
- Enter value ⌨Return (The WU or Hours presetting is taken as basis).
  ⇒ The ZM value is overwritten and marked with an !.

**Order number**       To enter an order number, as assignment to the order from the commercial dealer system.
The order number entered is shown in the printout of the operation item list and in the operation item list saved.
📖 see section "12.4.1 Printout of the operation item list".
📖 see section "12.4.2 Save operation item list?".

ⓘ An order number allocated in ASSYST is transferred automatically to the " Operation item list" when you change from ASSYST to ASRA.
    📖 see section "13.4 ASSYST - without service scope display".
    📖 see section "13.5 ASSYST - with service scope display".
    📖 see section "13.6 ASSYST PLUS".

**Delete ⌨Alt + D**       Deletes the operation item(s) selected in the operation item list.

**Up ⌨Alt + U**       Moves the operation item(s) selected one place **up**, for changing the sequence of the operation items within the operation item list.

**Down ⌨Alt + O**       Moves the operation item(s) selected one place **down**, for changing the sequence of the operation items within the operation item list.

**Damage code**
Changes to the mask "Damage code 1" 📖 see section "11.1 Damage Code 1".

[Alt] + C
ℹ️ The damage code is active if just one operation item has been selected.
If several operation items have been selected, the "Damage code" action button is deactivated.

**Print**
Calls the Print options window.
📖 see section "12.4.1 Printout of the operation item list".
📖 see section "7.3 Print".

**Save**
Calls the "Save operation item list" pop-up menu for entering the desired filename.
📖 see section "12.4.2 Save operation item list?".

**Exit**
Calls the "Do you really want to exit the operation item list?" pop-up menu which has to be acknowledged accordingly.
📖 see section "12.4.3 Do you really want to exit the operation item list?".

## 12.4.1 Printout of the operation item list

The "Operation item list" can be printed using the "Operation item list" and the "Print" ([F1]) function button.



**Operation item list**

Work order for: 00 P.C.          Order number: A4711

Date: 04.03.1999          Time: 10:05

Vehicle ident. number: WDB 202 080 1f 542375
Family: 12 202 C Class
Model code: 52 C 200 T
Sales designation: C 200 T
Engine: 111 941

| | | |
|---|---|---|
| 00-1100-02 | 2.4 | ASSYST, Service Operations List B Carry out |
| 00-1500-02 | 0.4 | Spark plugs Replace |
| 00-1560-02 | 0.4 | Supplementary operations if more than 80,000 km have elapsed since last change Carry out |
| 00-9160-01 | ZM | Notice concerning engine oil changes without product liability : Oil Delivered Disposal charges for oil and oil filter |
| | C: | Use engine oil delivered; see trunk |
| 72-2818-02 | 0.2 | Gas struts (both) on rear door Remove and install, replace as required |
| | | Damaged part: 74221 Gas pressure spring, tailgate |
| | | Damaged type: 36 noises |
| | | Damage identifier: 0 Original equipment/reconditioned part warranty prior to installation |
| | | Repair type: 7 Repair using material |
| 72-4831-02 | 1.3 | Inside release handle on 1st door, Location:..... Expose for access, inspect parts and replace as indicated |
| 32-7831-01 | 00.5 | Pneumatic/spring brake accumulators for left-side ride-height control Replace |
| 32-7655-02 | 0.5 | Ride-height control Bleed air from system following testing |

8 Op. item  Total  5.7  Hours

WISE027

| **Order number** | If there is an online connection to a commercial dealer system, the order number of the commercial dealer system is entered. Otherwise the order number which has been entered manually or transferred from ASSYST will be printed. |
|---|---|
| **Date** | Date the operation item list was created. |
| **Time** | Time at which the operation item list was created. |
| **Vehicle ident. number** | Displays the vehicle ident. number entered in the "ASRA Vehicle requirements" or a part of it (3 to 14 digits). |
| **Family** | Displays the family entered in the "ASRA Vehicle requirements". |
| **Model code** | Displays the model code entered in the "ASRA Vehicle requirements". |
| **Sales designation** | Displays the sales designation which applies for the vehicle context selected.<br>For an online connection to a commercial dealer system, e.g. order for other vehicle. |
| **Engine** | This function is not yet relevant.<br>For an online connection to a commercial dealer system. |
| **Operation items** | An operation item is made up of the operation number (6 figure), the line number, WU or decimal hours and the operation text. |

| | **I:** | **Customer request:**<br>Information which has been entered manually in the "ASRA Vehicle requirements" and which provides the mechanic with information on the operation items selected. |
|---|---|---|
| | **Damage code** | Displays the damage code with damaged part, type of damage and type of repair allocated for the operation item. |
| | **Underline:** | Shows that the ZM value has been overwritten. |

| **Op. item** | Displays how many operation items are in the operation item list. |
|---|---|
| **Total** | Displays the total of work units (WU) or decimal hours (Hours) depending on the setting. |

### 12.4.2 Save operation item list?

The "Save operation item list ?" pop-up menu is called with the following actions:

- From the "Operation item list" if the "Save" function button is selected.
- If at least one operation item has been transferred to the "Operation item list" and
  - the vehicle context is changed in the "ASRA Vehicle requirements" mask.
  - ASRA is ended with the "Previous Screen", "Menu" or "Exit" function key.
  - a file already saved is called using the "Retrieve" function key.

You can use the default filename "JOBORDER" or allocate a new filename.

Based on the inputs in the "System Configuration" mask, the path name and file abbreviation (e.g. txt) are preset. 
📖 see section "16.1 System Configuration".

The file created when saving can be edited further by a third system.
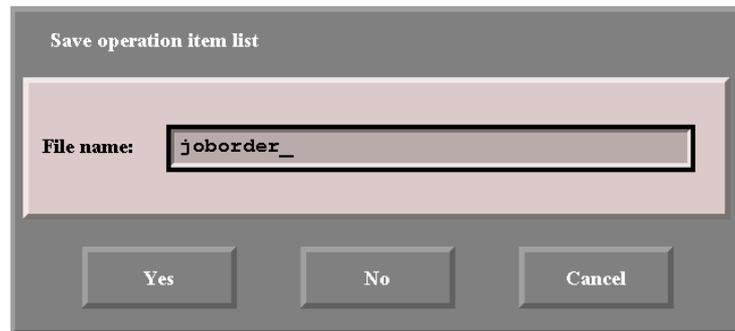


WIS3E136

| File name | For entering a filename (any number of characters can be used). |
|---|---|
| | Selection/input options: |
| | • The "JOBORDER" filename can be used, the filename is overwritten every time. |
| | • A new filename can be allocated. |
| **Yes** | Saves the "Operation item list" under the filename entered. |
| | ⓘ  If the file already exists, the following pop-up menu is called "File already exists, overwrite file?" which should be acknowledged accordingly. |
| **No** | Closes the pop-up menu, the file is **not** saved. Depending on the initital situation, ASRA is ended or a new vehicle context with operations items is retrieved. |
| **Cancel** | Closes the pop-up menu, the file is **not** saved and the operation item list remains active. |

### 12.4.3 Do you really want to exit the operation item list?

The "Do you really want to exit the operation item list?" pop-up menu is called from the "Operation item list" mask by the "Exit" function button.

If the pop-up menu is acknowledged with "Yes", the "Operation item list" is ended and the system returns to the "ASRA Vehicle requirements" after input of a filename in the "Save operation item list?" pop-up menu.



WIS3E029
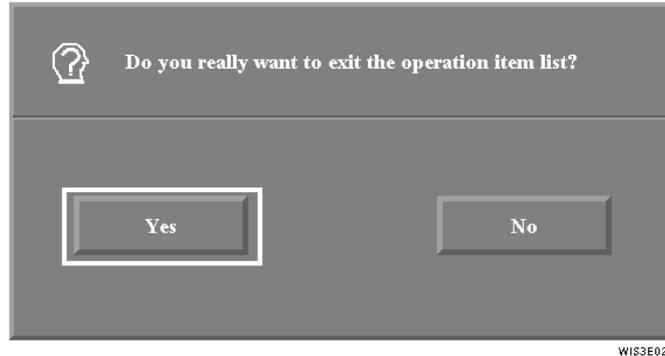
**Yes**          Calls the "Save operation item list?" pop-up menu for entering a filename.
               📖 see section "12.4.2 Save operation item list?".

**No**           Closes the "Do you really want to exit the operation item list?" pop-up menu.

### 12.4.4 Document Selection together with ASRA

In the "Document Selection", the relevant document titles of the workshop documentation are listed depending on the vehicle context chosen in connection with the operation items selected.

The documents are displayed by selecting one or several document titles and the "Display" action button. It is also possible to carry out an individual document search by calling "Infobox 2" with the "Additional Information" action button.

ⓘ   If document titles are displayed in the "Selection of documents" **for one operation number** in connection with the vehicle context selected, these are usually sorted as follows:

- Document titles directly connected to the operation number are listed at the start of the document selection.
- Document titles containing information concerning the operation (indirect connection) are listed after.

    If no priority has been given, the documents are displayed in the usual order (sorted according to function group and type of information).

WIS3E201

| Selection of documents | Lists the individual document titles. One or several document titles can be selected. |
|---|---|
| **Validation** | Contains the validity of the document around which the selection frame is positioned. |
| **Revisions** | Contains information on the revision reason/date of the document around which the selection frame is positioned. |
| **Display** $\boxed{\text{Alt}}$ **+ D** | Displays the document(s) selected in the document selection list. |
| | ℹ️ If several documents are selected, the corresponding documents are nested behind one another and can be displayed using "Document Functions". |
| **Additional Information** | Opens "Infobox 2" to carry out an individual document search. |
| | 📖 see section "5.2 Infobox 2" |

## 13        ASSYST

With the "ASSYST" function, it is possible to generate a vehicle-related service sheet dynamically. The "ASSYST" function in WIS differentiates whether a vehicle is equipped with "ASSYST" or "ASSYST PLUS".

### ASSYST

Since March 1997 the **A**CTIVE **S**ERVICE **SYST**EM  (ASSYST) has been included in the Mercedes-Benz vehicles.

The Active Service System (ASSYST) replaces rigid maintenance intervals and instead takes into consideration how the vehicle is actually used.

The "ASSYST" function in WIS defines the scope of service to be carried out. For vehicles equipped with ASSYST, a differentiation is made between service scope A (small service) and service scope B (more extensive service).

When defining the scope of service to be carried out, you have to take into consideration whether the vehicle is equipped **with service scope display** 📖 see section "13.5 ASSYST - with service scope display", or **without service scope display** 📖 see section "13.4 ASSYST - without service scope display"

ⓘ        You can call up more information on the ASSYST function by entering the document number ***GF0020P0997%*** in "Infobox 1".

### ASSYST PLUS

"ASSYST PLUS" is a further development of the well-known ASSYST system and is being used for the first time in this new form in the new E class (type 211). "ASSYST PLUS" evaluates all service-related data on the vehicle and compiles them into a scope of service according to the date the service is due. The scope of service is identified by means of the workshop code.

The workshop code can be

- read from the instrument cluster and entered into WIS (standard scenario).

or

- read out using STAR DIAGNOSIS and transferred to WIS.

For this purpose, the ASSYST mask in WIS has been expanded and the interface to STAR DIAGNOSIS has been adapted.

In WIS, the "ASSYST" function comprises the existing "ASSYST" functions and the new functions of "ASSYST PLUS". These mean that the workshop code can be entered into the "ASSYST" mask or be transferred using STAR DIAGNOSIS. Using this code, WIS automatically determines the exact scope of service and selects the additional work to be performed 📖 see section "13.6 ASSYST PLUS".

## 13.1     Graphic display - Dynamic generation of the "ASSYST" service sheet

**Infobox 1**

**Input/Selection**

Vehicle ident. number

**Selection/Input**

Model together with engine type (6 digits)

ℹ️ Combine the respective entries in the selection lists

**ASSYST**

**Selection**

**with** service scope display

**Selection**

**without** service scope display

**Input**

Current km reading (or miles)
customer, service foreperson, oil grade/viscosity,
order number, completion date

**Input**

Current km reading (or miles)
customer, service foreperson, oil grade/viscosity,
order number, completion date

**Selection (read from vehicle)**

| Service scope A | Service scope B |
|---|---|

**Selection (see service book)**

| First scheduled service | Last service performed | |
|---|---|---|
| | Service A | Service B |

**Input**

km-reading (or miles) at which
serivce B
was carried out

**Continue**

Selection of additional work for dynamic service sheet

**Display service sheet**

**ASRA**

Display of dynamic service sheet
(with additional work selected)

Display operation items

Print using Document Functions

## 13.2        Graphic display - Dynamic generation of the "ASSYST PLUS" service sheet

**Infobox 1**

| **Input/Selection** | **Selection/Input** |
|---|---|
| Vehicle ident. number | Model together with engine type (6 digits) |
| | ⓘ Combine the respective entries in the selection lists |

**ASSYST**

**Selection**

with ASSYST PLUS

**Input**

Current km reading (or miles)
customer, service foreperson, oil grade/viscosity,
service code, workshop code
order number, completion date

**Continue**

**Automatic selection of additional work**

| Accept automatic selection of additional work | Supplement or deactivate automatic selection of additional work on customer's request |
|---|---|

**Display service sheet**

**ASRA**

Display of dynamic service sheet
(with additional work selected)

Display operation items

Print using Document Functions

## 13.3        Calling up ASSYST

In WIS you enter the "ASSYST" mask using "Infobox 1".



Werkstattinformationssystem
Infobox 1

| Sales designation: | Vehicle ident. number: | Engine number: | Automatic transmission: | Gr.: | Entry: Mod.Y.: Op. no.: |
|---|---|---|---|---|---|
| CL 600 | WDB2153781A001652 | 137.97040005637 | 722628 01 610914 | | |

CAR                                                                    Directory

Vehicle ident. number:                                Op. no.:                Document No.:
WDB     2153781A001652     WDB2153781A001652

| Sales designation | Model | Engine | Type | Unit |
|---|---|---|---|---|
| CL 600 | 215.378 | 137.970 | AG. | 722.628     W 5A 580 |

| Sales designation: | Model: | Engine number: | Type: | Automatic transmission: |
|---|---|---|---|---|
| CL 600 | 215.378 | 137.970 40 005637 | AG | 722.628 01 610914 |

Country: Mod. Y.:   SA Code:      Documentation    Troubleshoot.    Damage      ASRA      ASSYST
                                                  Symptoms         code

Add.        Deselect            What is                            Menu      Help      Previous
Functions                        new?                                                  Screen

WIS3E232

**ASSYST**      Opens the "ASSYST" mask.

ⓘ The "ASSYST" action button is only active for vehicles with "ASSYST" or "ASSYST PLUS" and if a vehicle ident. number or a 6 digit model has been selected or entered with the motor type.
From the vehicle data entered, the software recognizes whether the vehicle is equipped

– with ASSYST service scope display,

– without ASSYST service scope display,

– with ASSYST PLUS.

The respective square is preselected in the "ASSYST" mask. If the wrong square is active, the selection can ba changed to the one wanted.

## 13.4 ASSYST - without service scope display

For vehicles **without service scope display** you have to differentiate whether a service is being carried out on the vehicle for the first time or whether a service has already been carried out.

ⓘ You can see which service was carried out last in the service book.

When defining the service scope, the following procedure must be observed after selecting "**without** service scope display".

- **Input** "Current km reading" (or miles), customer, service foreperson, oil grade/viscosity, notes where necessary, order number, completion date.
- **Select** "Yes" or "No", depending on whether a reception dialog has been carried out or not.
- For vehicles on which a service is to be carried out **for the first time**
  **select** "First scheduled service".
- For vehicles on which a service has **already** been carried out
  **select** "Last service scope performed",
  — depending on which service was carried out last,
    ⇒ **select** "Service A",
      or
    ⇒ **select** "Service B at km reading"**,**
      Enter the km reading (or miles) at which service B has already been carried out.
- **Select** the "Continue" action button.



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**without service scope display** For selecting vehicles **without** service scope display.

| **Current km reading (or miles)** | For entering the current km reading (or miles). This information is displayed on the service sheet which is generated dynamically. |
| --- | --- |
| | ⓘ Obligatory box. |
| | The unit of measurement (kilometers or miles) can be preset in the "System Configuration" mask. 📖 see section "16.1 System Configuration". |
| **Customer** | For entering the customer's name (max. 32 characters). This infomation is displayed on the service sheet which is generated dynamically. |
| | ⓘ Optional box. |
| **Service foreperson** | For entering the service foreperson dealing with the job. This information is displayed on the service sheet which is generated dynamically. |
| | ⓘ Optional box. |
| **Oil grade/viscosity** | For entering the oil grade and viscosity required. This information is displayed on the service sheet which is generated dynamically. |
| | ⓘ Optional box. |
| **Notes** | For entering customer requests and notes. This information is displayed on the service sheet which is generated dynamically. |
| | ⓘ Optional box. |
| **Order number** | For entering the order number (max. 15 characters). This information is displayed on the service sheet which is generated dynamically. |
| | ⓘ Optional box. |
| | The order number is transferred to the "Operation item list" when you change from "ASSYST" to ASRA. 📖 see section "12.4 Operation item list". |
| **Completion date** | For entering the completion date (max. 15 characters). This information is displayed on the service sheet which is generated dynamically. |
| | ⓘ Optional box. |

| **Reception dialog carried out** | **Yes** | A reception dialog has been carried out. |
| --- | --- | --- |
| | **No** | A reception dialog has **not** been carried out. |
| | ⓘ This information is displayed on the service sheet which is generated dynamically. | |

**Determining service scope**

| **First scheduled service** | To be selected if the vehicle is to be serviced for the first time. | |
| --- | --- | --- |
| | ⓘ The new service (A or B) is selected automatically. | |
| **Last service scope performed** | To be selected if a service has already been performed on the vehicle. | |
| | The corresponding service must be selected depending on which service was performed last. | |
| | ⓘ Refer to the service book to see which service was performed last. | |
| | **Service A** | To be selected if the service perfomed last was service A. |
| | **Service B at km reading** | To be selected if the service performed last was service B. |
| | | ⓘ In addition, you **must** enter the km reading (or miles) at which service B was performed last in the input box. |
| **New service scope** | **Service A** | The service to be performed is defined automatically depending on the kilometer reading (or miles) entered and the setting which has been selected "First scheduled service" or "Last service scope performed". |
| | **Service B** | |
| **Continue**<br>⌨ Alt + C | Opens the "Additional work" mask. | |
| | ⓘ The "Continue" action button is only active if the kilometer reading (or miles) has been entered and the service scope defined. The service scope can only be defined if the information for defining the service scope has been given. | |

## 13.5       ASSYST - with service scope display

For vehicles **with service scope display**, the service scope displayed must be read from the vehicle.

When defining the service scope the following must be observed after selecting "**with** service scope display":

*   **Input** "Current km reading" (or miles), customer, service foreperson, oil grade/viscosity, notes where necessary,  order number, completion date.
*   **Select** "Yes" or "No", depending on whether a reception dialog has been carried out or not.
*   **Select** "Service A" or "Service B".
*   **Select** the "Continue" action button.

ⓘ    For vehicles with a fixed service scope (e.g. SLR), the service that has to be performed is pre-selected automatically. This selection (A or B) cannot be changed.



| with service scope display | For selecting vehicles **with** service scope display. |
|---|---|
| **Current km reading (or miles)** | For entering the current km reading (or miles). This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Obligatory box.<br>The unit of measurement (kilometers or miles) can be preset in the "System Configuration" mask. 📖 see section "16.1 System Configuration". |
| **Customer** | For entering the customer's name (max. 32 characters). This infomation is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box. |
| **Service foreperson** | For entering the service foreperson dealing with the job. This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box. |
| **Oil grade/viscosity** | For entering the oil grade and viscosity required. This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box. |

| | |
|---|---|
| **Notes** | For entering customer requests and notes. This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box. |
| **Order number** | For entering the order number (max. 15 characters). This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box.<br>The order number is transferred to the "Operation item list" when you change from "ASSYST" to ASRA. 📖 see section "12.4 Operation item list". |
| **Completion date** | For entering the completion date (max. 15 characters). This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box. |
| **Reception dialog carried out** | **Yes**     A reception dialog has been carried out.<br>**No**     A reception dialog has **not** been carried out.<br>ⓘ This information is displayed on the service sheet which is generated dynamically. |
| **New service scope** | For selecting the service scope displayed in the vehicle (A or B). |
| **Continue**<br>[Alt] + C | Opens the "Additional work" mask.<br>ⓘ The "Continue" action button is only active if the kilometer reading (or miles) has been entered and the service scope defined. |

## 13.6      ASSYST PLUS

For vehicles **with ASSYST PLUS**, the workshop code is read from the vehicle and entered in WIS in the "ASSYST" mask. The service scope is then determined automatically and the additional work preselected.

Please note the following procedure:

- The "ASSYST PLUS" **box** has already been selected.
- **Input** "Current km reading" (or miles), service code, workshop code, customer, service foreperson, oil grade/viscosity, notes where necessary, order number, completion date.
- **Select** the "Yes" or "No" box depending on whether a reception dialog has been carried out or not.
- **Select** the "Continue" action button.



| ASSYST PLUS | For selecting vehicles **with** ASSYST PLUS. |
|---|---|
| **Current km reading (or miles)** | For entering the current km reading (or miles). This information is displayed on the service sheet which is generated dynamically.<br>ℹ️ Obligatory box.<br>The unit of measurement (kilometers or miles) can be preset in the "System Configuration" mask. 📖 see section "16.1 System Configuration". |
| **Service code** | To be read from the instrument cluster. The service code is used for rough planning. Every letter stands for a specific number of hours, e.g. A = 1 hour, B = 2 hours, ...<br>ℹ️ Optional box. |
| **Customer** | For entering the customer's name (max. 32 characters). This infomation is displayed on the service sheet which is generated dynamically.<br>ℹ️ Optional box. |
| **Service foreperson** | For entering the service foreperson dealing with the job. This information is displayed on the service sheet which is generated dynamically.<br>ℹ️ Optional box. |

| | |
|---|---|
| **Oil grade/viscosity** | For entering the oil grade and viscosity required. This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box. |
| **Notes** | For entering customer requests and notes. This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box. |
| **Workshop code** | To be read from the instrument cluster. From the workshop code, the service code is determined automatically and the additional work preselected.<br>ⓘ Obligatory box. |
| **Order number** | For entering the order number (max. 15 characters). This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box.<br>The order number is transferred to the "Operation item list" when you change from "AS-SYST" to ASRA. 📖 see section "12.4 Operation item list". |
| **Completion date** | For entering the completion date (max. 15 characters). This information is displayed on the service sheet which is generated dynamically.<br>ⓘ Optional box. |
| **Reception dialog carried out** | **Yes**  A reception dialog has been carried out.<br>**No**  A reception dialog has **not** been carried out.<br>ⓘ This information is displayed on the service sheet which is generated dynamically. |
| **Continue**<br>⌨ Alt + C | Opens the "Additional work" mask.<br>ⓘ The "Continue" action button is only active if the kilometer reading (or miles) and the workshop code have been entered. |

## 13.7     Additional work

After defining the scope of service, possible additional work for the vehicle is offered for selection in the "Additional work" mask.

Additional work is service work which has to be performed depending on the vehicle status, extras, km reading (or miles) and the age of the vehicle **in addition** to the service defined.

ⓘ   For vehicles with ASSYST PLUS, the additional work is preselected automatically. Depending on the customer's request, additional work selected automatically can be deactivated or, if required, further additional work supplemented manually. In this case, after acknowledging the pop-up menu, the workshop code in the service sheet is marked with an asterisk.

After selecting the
- "**Display service sheet**" action button, the service sheet which is generated dynamically is called.
- "**ASRA**" action button, the "Operation item list" is called. The operation items for the scope of service and the operation items for the additional work selected are transferred automatically to the "Operation item list" mask.
  📖 see section "12.4 Operation item list".
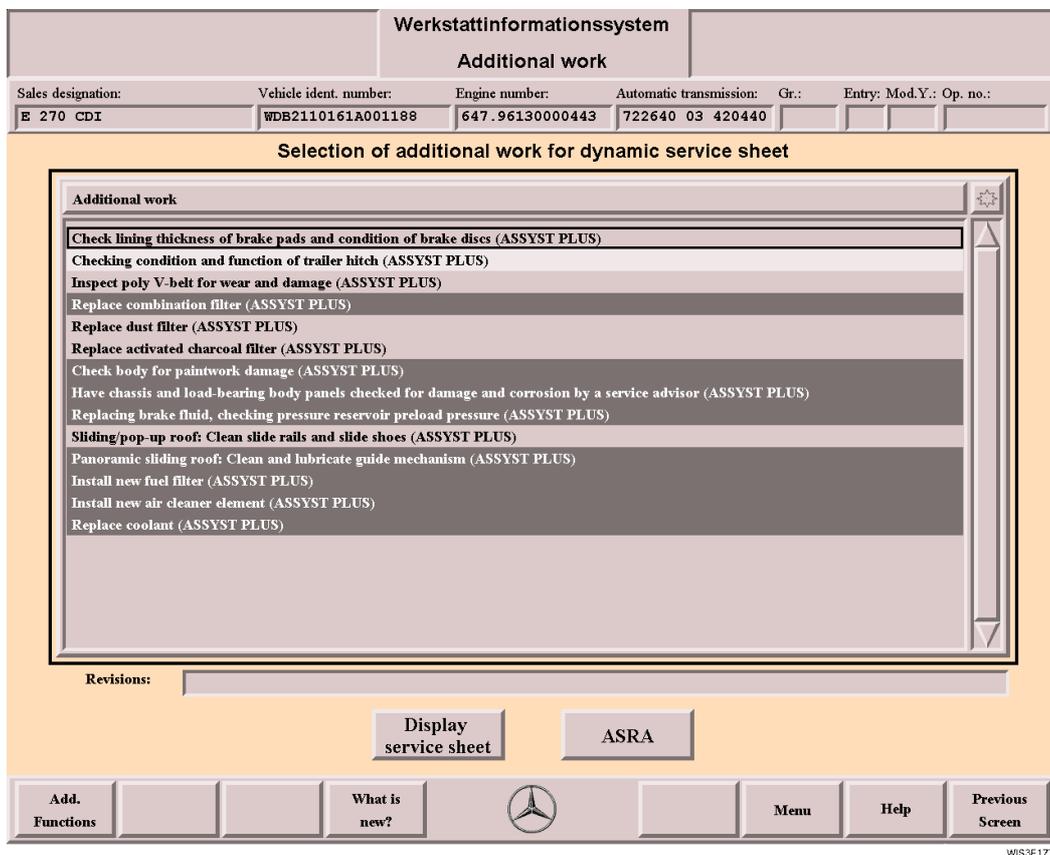


|  | Werkstattinformationssystem | | |
|---|---|---|---|
|  | **Additional work** | | |

| Sales designation: | Vehicle ident. number: | Engine number: | Automatic transmission: | Gr.: | Entry: Mod.Y.: Op. no.: |
|---|---|---|---|---|---|
| E 270 CDI | WDB2110161A001188 | 647.96130000443 | 722640 03 420440 | | |

**Selection of additional work for dynamic service sheet**

**Additional work**

Check lining thickness of brake pads and condition of brake discs (ASSYST PLUS)
Checking condition and function of trailer hitch (ASSYST PLUS)
Inspect poly V-belt for wear and damage (ASSYST PLUS)
Replace combination filter (ASSYST PLUS)
Replace dust filter (ASSYST PLUS)
Replace activated charcoal filter (ASSYST PLUS)
Check body for paintwork damage (ASSYST PLUS)
Have chassis and load-bearing body panels checked for damage and corrosion by a service advisor (ASSYST PLUS)
Replacing brake fluid, checking pressure reservoir preload pressure (ASSYST PLUS)
Sliding/pop-up roof: Clean slide rails and slide shoes (ASSYST PLUS)
Panoramic sliding roof: Clean and lubricate guide mechanism (ASSYST PLUS)
Install new fuel filter (ASSYST PLUS)
Install new air cleaner element (ASSYST PLUS)
Replace coolant (ASSYST PLUS)

**Revisions:**

[Display service sheet]   [ASRA]

[Add. Functions]  [What is new?]  ⊛  [Menu]  [Help]  [Previous Screen]

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| **Selection of additional work for dynamic service sheet** | Lists possible additional work for the vehicle selected and the service defined. The additional work necessary can be selected. Additional work with the same km reading (or miles) and/or time interval are grouped according to color. |
|---|---|

ⓘ   For vehicles with ASSYST PLUS, the additional work is preselected automatically. Depending on the customer's request, additional work selected automatically can be deactivated or, if required, further additional work supplemented manually. In this case, after acknowledging the pop-up menu, the workshop code in the service sheet is marked with an asterisk.

| **Revisions** | Contains information on the reason for revision/revision date for the additional work around which the selection frame is positioned. |
|---|---|

**Display service sheet**    Displays the vehicle-related service sheet 📖 see section "13.8 Service sheet".
Alt + D

**ASRA**                     Changes to the "Operation item list" mask. 📖 see section "12.4 Operation item list".
Alt + A                      The operation items for the service and the operation items for the additional work selected are
                             transferred to the "Operation item list" mask.

## 13.8        Service sheet

The vehicle-related service sheet contains all work for the service scope specified and where necessary the additional work
to be carried out in the framework of the service scope. It can be printed and is used as reference for the mechanic. The
vehicle-related service sheet only applies for the vehicle for which it was created.

ℹ️        When the service sheet is printed, the references are replaced by references to the maintenance manual. The infor-
          mation entered in the "ASSYST" mask on the current kilometer reading, customer's name, service foreperson, oil
          grade / viscosity, notes, service code, workshop code, order number, completion date and reception dialog are also
          shown and printed.

**Service sheet page 1**



| AP00.20-P-1203AAA | SERVICE SHEET for ASSYST PLUS Service 14 | Normal view | Validity OFF | Page: | 2/ 4 |

| AP00.20-P-1203AAA | SERVICE SHEET for ASSYST PLUS Service 14 | 22.10.01 |

**MODEL    211**

**Passenger cars**                **Model 211**

⚠️ **Vehicle-related SERVICE SHEET**

Customer: **Peter Brown**                              Order number: **4711**

Workshop code **3CJKL1\***                             Service code: **C**

Current kilometer reading: **20000**                   Oil grade/viscosity: **Aral Super LL**

Dialog acceptance conducted      Yes **X**      No

Notes/explanations: **use engine oil delivered; see trunk**

Correctness of service scope confirmed by              Completion of jobs confirmed by
service foreman:                                       mechanic's signature:
                               Completion date
**Thomas Example**             **15.05.2002**

**Additional operations**
Completed ☒                                            **Not OK**

WIS3E237

\*          For vehicles with ASSYST PLUS, the additional work is preselected automatically. Depending on the cus-
           tomer's request, additional work selected automatically can be deactivated or, if required, further addition-
           al work supplemented manually. In this case, after acknowledging the pop-up menu, the workshop code in
           the service sheet is marked with an asterisk.

**Service sheet page 2**



| AP00.20-P-1203AAA | SERVICE SHEET for ASSYST PLUS Service 14 | Normal view | Validity OFF | Page: | 3/ 4 |

**Additional operations**

Completed ☒          Not OK

**Service 4**
☐ Replace combination filter      AP83.00-P-8384T

**Service 6**
☐ Check body for paintwork damage    ☐ AP98.00-P-9850BA
**by service advisor**

**Service 6**
☐ Chassis and load-bearing body    ☐ AP00.20-P-0090BA
components: Check for damage and
corrosion **by service advisor**

**Service 6**
☐ Replacing brake fluid, checking pressure    ☐ AP42.00-P-4281T
reservoir preload pressure

**Service 8**
☐ Panoramic sliding roof: Clean and lubricate    AP77.20-P-7732PB
guide mechanism

**Service 9**
☐ Replace fuel filter    AP47.20-P-0780T

**Service 13**
**Engine compartment**

AP18.00-P-0101TC

WIS3E238
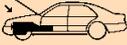
**References**    References are marked by a red border. After the reference has been selected, the document in question is displayed. 📖 see section "2.4.11 Reference".

ℹ️ When the service sheet is printed, the references are replaced by references to the maintenance manual. 📖 see section "7.3 Print".

## 14        Add. functions

The "Add. Functions" function button calls a submenu with more action buttons.
The "Add. functions" submenu can be called from anywhere in WIS.
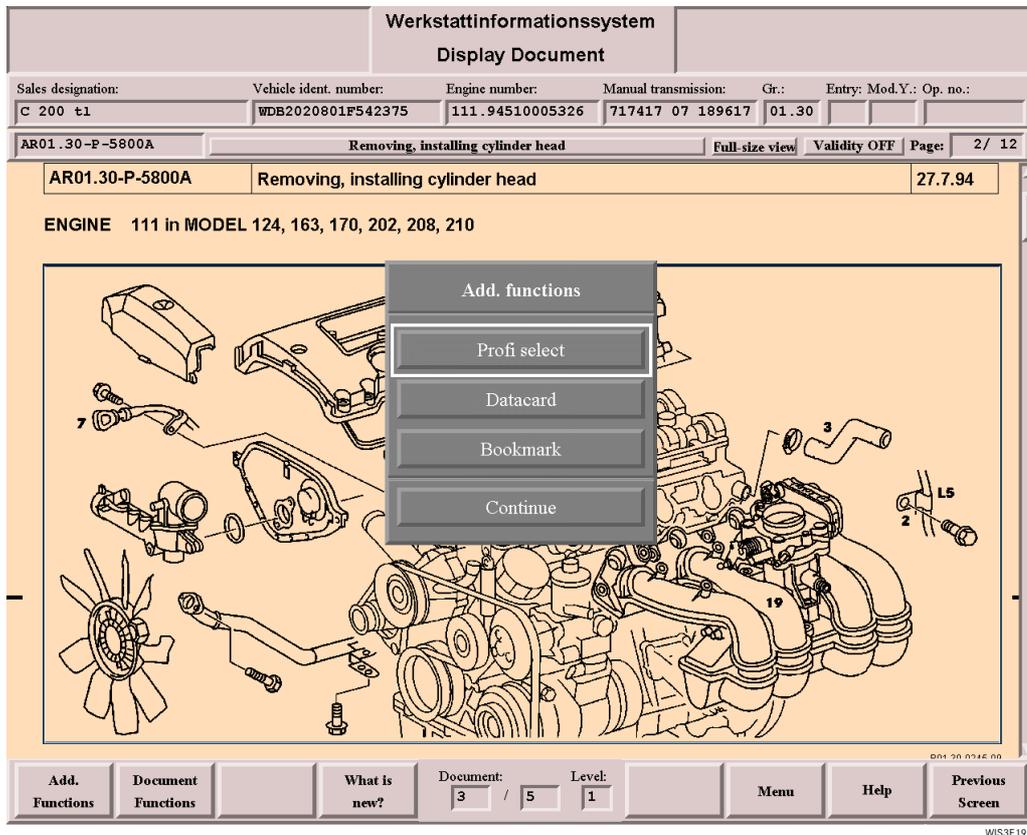


**Profi select/deselect**    This action button has a dual function.

| | |
|---|---|
| **Profi select** | displays the basic data tables (e.g. torque loadings, capacities, test/adjustment values) (where available) at the end of the document to the experienced user (profi) after opening a CASE 2 document and thus skips the entry table and pictures. |
| **Profi deselect** | reactivates the "normal" functions of the Display Document, i.e. after opening a document, the first page in the document is displayed again.<br>📖 see section "14.1 Profi select/deselect". |

**Datacard**    Displays the datacard for the vehicle in question if there is a link to the EPC and a vehicle ident. number has been entered in the "Infobox 1" or an order is being processed.
📖 see section "14.2 Datacard".

**Bookmark**    By setting a bookmark, the screen section of the document currently displayed is marked.
📖 see section "14.3 Bookmark".

**Continue**    Closes the "Add. functions" submenu.

## 14.1 Profi select/deselect

ℹ️      Profi select / deselect only functions for "CASE 2 documentation".

After opening a document, "Profi select" shows the experienced user (profi) the basic data tables (e.g. torque loadings, capacities, test/adjustment values).

It is assumed that the "profi" is familiar with "routine" information which however can still be displayed by paging in the document.

This action button has a dual function

- **Profi select**
  For CASE 2 documentation, this causes the basic data tables to be accessed (e.g. torque loadings, capacities, test/adjustment values).

- **Profi deselect**
  Reactivates the "normal" functioning of the Display Document.

**Profi select**      When the Display Document is opened, the basic data tables are accessed immediately.

**Profi deselect**      The "Profi select" function is cancelled.

## 14.2      Datacard

The datacard displays all vehicle-related information (with code identification written in full). The datacard can only be called if there is a link to the EPC (Electronic Parts Catalog) and a vehicle ident. number has been entered in "Infobox 1".

| | |
|---|---|
| **Werkstattinformationssystem** | |
| **Display Document** | |

| Sales designation: | Vehicle ident. number: | Engine number: | Automatic transmission: | Gr.: | Entry: Mod.Y.: Op. no.: |
|---|---|---|---|---|---|
| S 500 lg | WDB2201751A001495 | 113.96030018996 | 722633 01 067170 | | |

|  | Datenkarte | Page: | 2/ 3 |

**Mercedes-Benz Fahrzeugdaten für Fzg.-Nr.:      WDB2201751A001495**

| | | | |
|---|---|---|---|
| Motor-Nr. | 113960 30 018996 | Achse vorn 1 | |
| Typ | S500L | Achse vorn 2 | 04315003 |
| Auftrags-Nr. | 0 8 557 16519 | Achse hint. 1 | |
| Produkt-Nr. | | Achse hint. 2 | |
| Getriebe | 722633 01 067170 | Aufb./Fahrerh. | 00000 |
| Vert.Getriebe | | Pritsche | |
| Nebenantrieb | | VIN | |
| Reifen vorn 1 | CONTINENTAL | Anh.-Kuppl. | |
| Reifen vorn 2 | | Lenkung | |
| Reifen hint. 1 | | Ausstattung | 231 |
| Reifen hint. 2 | | Lack/L-Zus.1 | 189 |
| Heizung | | Lack/L-Zus.2 | |
| Felgen | | Lack/L-Zus.3 | |
| Leuchten | BOSCH | Lack/L-Zus.4 | |
| Scheibenwisch. | | Lack/L-Zus.5 | |
| Seilwinde | | Türschloß | |
| Wegdrehz. | | Lenkschloß | ******** |
| | | Getriebeschloß | ******** |
| | | Tankschloß | ******** |
| | | Retarder | 8 980930 |

220        PARKTRONIC SYSTEM
223        REAR SEAT ADJUSTMENT ELECTRICAL
242        FRONT SEAT ELECTR. ADJUST RIGHT W/MEMORY SWITCH

| Add. Functions | Document Functions | | What is new? | Document: 1 / 1 | Level: 1 | | Menu | Help | Previous Screen |

WIS3E202

## 14.3 Bookmark

By setting the "bookmark" **in an open document**, the screen section currently displayed is marked. The individual document titles are stored together with a keyword entered and can be called later without vehicle or topic reference.

The marked screen section of the document in question can be called anywhere in WIS using the "Bookmark" action button.

ℹ️ A bookmark can be shown or deleted by every WIS user.
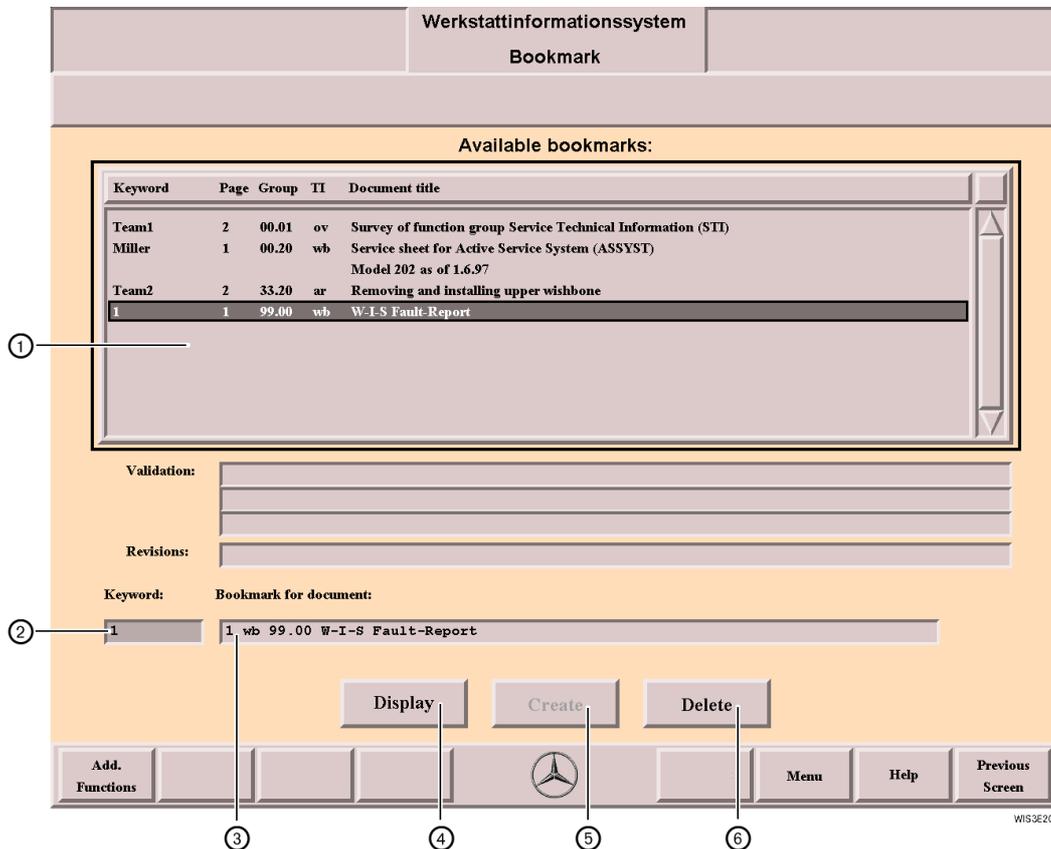


| ① | Available bookmarks | The document selection list displays all the bookmarks created in the network. |
|---|---|---|

|   | **Keyword:** | Displays the keyword entered by the user. |
|---|---|---|
|   | **Page:** | Displays the page in the document on which the bookmark was set. |
|   | **Group:** | Displays the function group/subgroup of the document. |
|   | **TI:** | Displays the type of information of the document. |
|   | **Document title:** | Displays the document title of the document in which the bookmark was set. |

ℹ️ Only single selection is possible in the document selection list.

| ② | Keyword | For entering a keyword on the respective document title (max. 10 digits). |
|---|---|---|

ℹ️ A bookmark can also be allocated without a keyword, the page number of the document in question is then allocated automatically as keyword.

| ③ | Bookmark for document | For displaying the document title to which a keyword is to be assigned. |
|---|---|---|
| ④ | Display | For displaying a document selected in the document selection list. |
| ⑤ | Create | Creates a bookmark for the document. |
| ⑥ | Delete | Deletes the selected bookmark from the document selection list. |

## 15        Menu

The "Menu" function button calls a submenu with more action buttons. Using the action buttons, a direct change to other masks within WIS is possible.
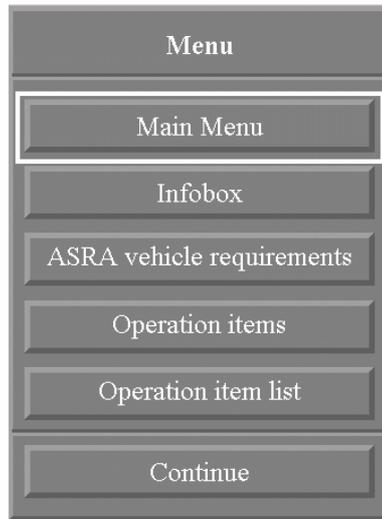


WIS3E154

**Main Menu**            Switches to the "Main Menu" mask.

ⓘ  If in ASRA at least one operation item has been transferred to the "Operation item list", the "Save operation item list" pop-up menu is called.
📖 see section "12.4.2 Save operation item list?".

**Infobox**               Switches to the "Infobox 1" mask.

ⓘ  If in ASRA at least one operation item has been transferred to the "Operation item list", the "Save operation item list" pop-up menu is called.
📖 see section "12.4.2 Save operation item list?".

**ASRA vehicle**          Switches to the "ASRA vehicle requirements" mask. 📖 see section "12.2 ASRA Vehicle require-
**requirements**          ments".

ⓘ  "ASRA vehicle requirements" is active if the user is in the ASRA environment.

**Operation items**       Switches to the "Operation items" mask. 📖 see section "12.3 Operation items".

ⓘ  Operation items is active if the user is in the ASRA environment.

**Operation item list**   Switches to the "Operation item list" mask. 📖 see section "12.4 Operation item list".

ⓘ  Operation item list is active if the user is in the ASRA environment.

**Continue**              Closes the "Menu" submenu.

## 16 System Administration

Various configurations are made using the "System Administration".



| | Werkstattinformationssystem |
| System Administration |

System Configuration

HW/SW Systems

Language Selection

Menu Help Previous Screen

WIS3E155
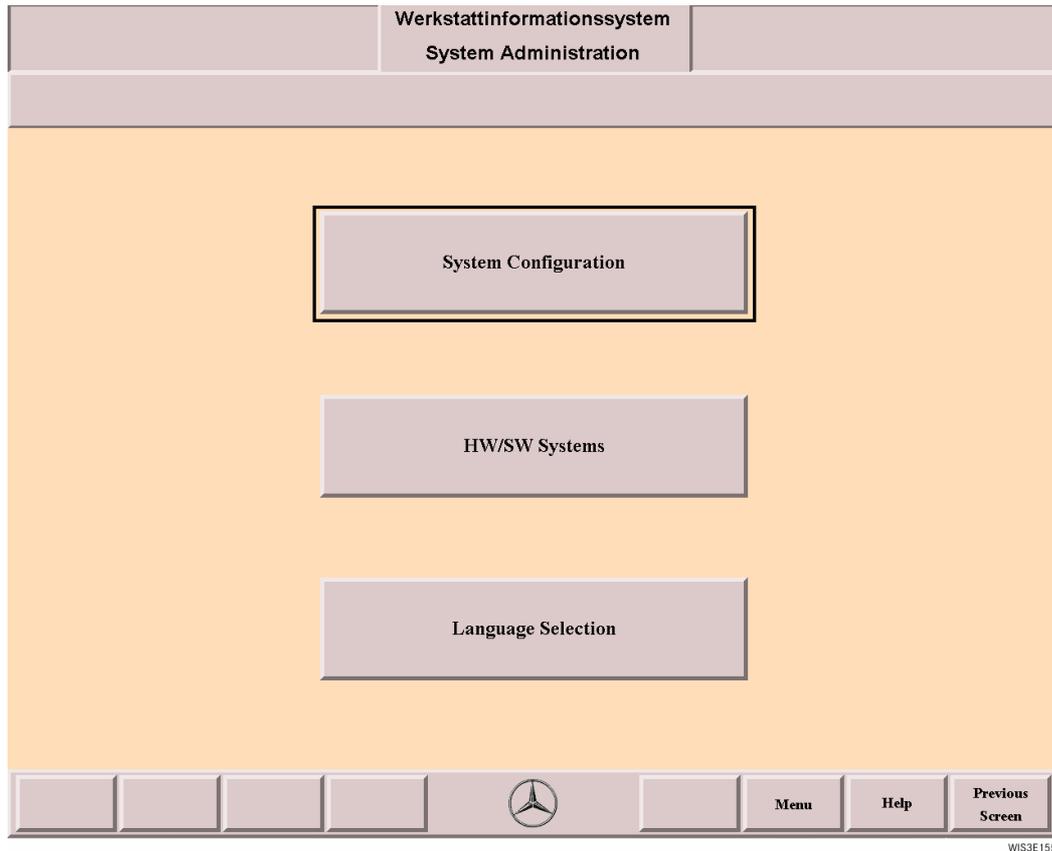
| | |
|---|---|
| **System Configuration** | The "System Configuration" mask is called. <br> see section "16.1 System Configuration". |
| **HW/SW Systems** | The "HW/SW Systems" mask is called. <br> see section "16.2 HW/SW Systems". |
| **Language Selection** | The "Language Selection" mask is called. <br> see section "16.3 Language Selection". |

## 16.1    System Configuration

Every user has access to the "System Configuration" mask. Workstation-specific settings are made here, i.e. these settings refer to the respective workstation.



WIS3E264

| | |
|---|---|
| **Directory path of output file** | Presetting for the directory path in which the "Operation item lists" are saved. The files saved are saved centrally on the server.<br>The following path has been set:<br>$\backslash opt \backslash MBCASE \backslash wis \backslash defaults \backslash joborder \backslash <Clientname>$<br>ⓘ The output path cannot be changed. |
| **Name of output file with file extension** | Presetting for the filename under which the "Operation item list" can be saved e.g. joborder.txt<br>The following file formats are allowed: txt, utf, ucs.<br>The filename can be allocated individually by the user when saving the "Operation item list".<br>📖 see section "12.4.2 Save operation item list?". |
| **Time set by foreman** | **Activated:**  The user is **authorized** to overwrite the ZM value (time set by foreman) in the "Operation item list" mask by a work unit (WU) or decimal hour value (Hours).<br>**Deactivated:**  The user is **not authorized** to overwrite the ZM (time set by foreman) value in the "Operation item list" mask. |
| **Time category** | For selecting the basic setting WU or Hours.<br>**WU:**  Work unit (3 digits) (1 WU = 5 minutes) or<br>**Hours:**  Decimal hours e.g. 1.5 (0.1 hours = 6 minutes)<br>ⓘ All workshops belonging to the German organization, as well as all Austrian workshops, set "WU" as Time category and "Domestic" as Region.<br>All other workshops outside Germany (with the exception of Austria) must set "Hours" as Time category and "Foreign" as Region so that the flat rates can be calculated and displayed correctly. |

| | |
|---|---|
| **Region** | For selecting the basic setting Domestic or Foreign. This is used for including various time calculation formulas. |
| **License country** | This information is required when support is needed. |
| | ⓘ This information is controlled by the license code and cannot be changed. |
| **License number** | Number for the maximum number of users who can work simultaneously in the network. |
| | ⓘ This information is controlled by the license code and cannot be changed. |
| **Unit of measurement** | Presetting for the "ASSYST" mask. Kilometers or miles are used for defining the service scope. |
| | 📖 see section ."13.4 ASSYST - without service scope display" |
| | 📖 see section "13.5 ASSYST - with service scope display". |
| | 📖 see section "13.6 ASSYST PLUS". |

| | |
|---|---|
| **Kilometers** | Kilometers are displayed in the "ASSYST" mask. |
| **Miles** | Miles are displayed in the "ASSYST" mask. |

| | | |
|---|---|---|
| **Highlight search term** | **Activated:** | Terms that were found using the "Search in entire document" function are highlighted grey in the document. 📖 see section "5.2 Infobox 2". |
| | **Deactivated:** | Terms that were found using the "Search in entire document" function are not highlighted in the document. |

| | |
|---|---|
| **OK** | Saves the "System Configuration". |
| **Previous Screen** | Closes the "System Configuration" mask and returns to the "System Administration" **without** saving any data. |

## 16.2      HW/SW Systems

The display refers to the respective workstation and displays information relevant to the software.
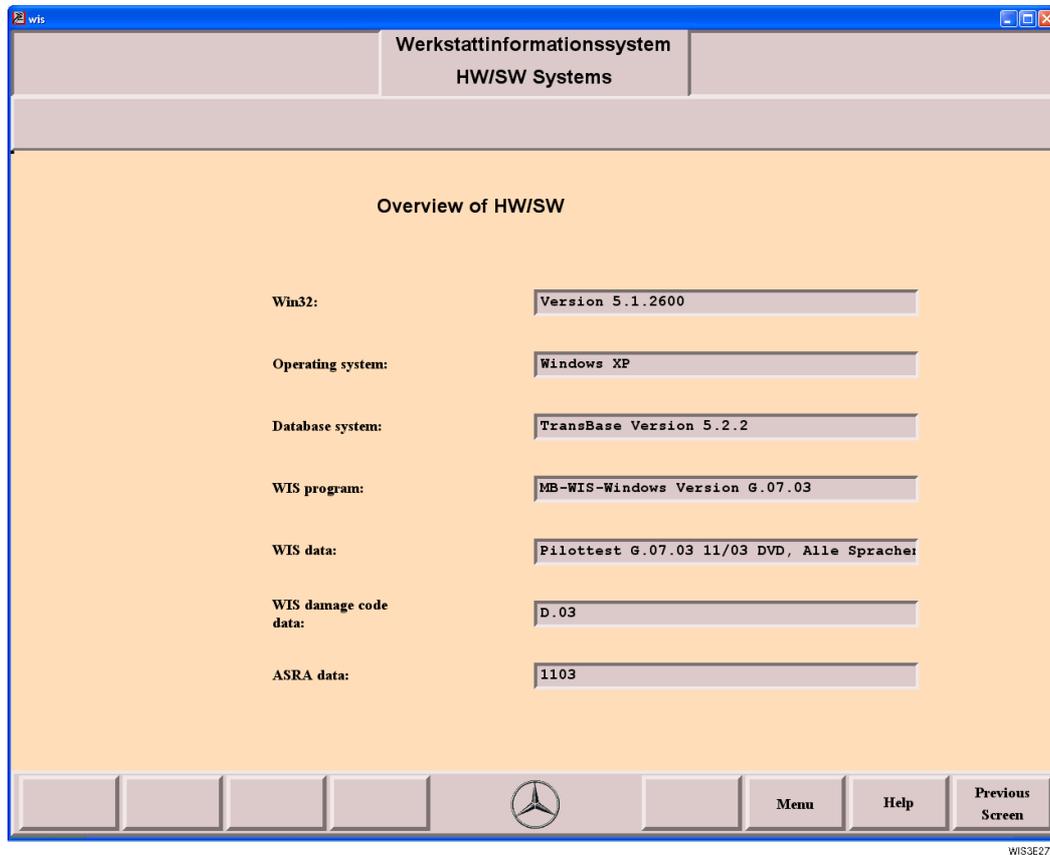


| | |
|---|---|
| **Win32s** | Microsoft Win32s version. |
| **Operating system** | Version of the operating system on the workstation. |
| **Database system** | Version of the TransBase database system. |
| **WIS Program** | Version of the WIS program. |
| **WIS data** | Version of the DVD edition. |
| **WIS damage code data** | Version of the WIS damage code data. |
| **ASRA data** | Version of the ASRA data. |
| **Previous Screen** | Closes the "HW/SW Systems" mask and returns to the "System Administration". |

## 16.3    Language Selection

The setting in the "Language Selection" are user-specific and only concern the user logged on.

The following settings are possible.

- **Dialog language (WIS and ASRA):** Concerns the dialog language (user-interface language) for the "WIS" and "ASRA" programs and the ASRA content language.
- **Document language (WIS):** Concerns the document search and document display (contents) in WIS.



WIS3E266
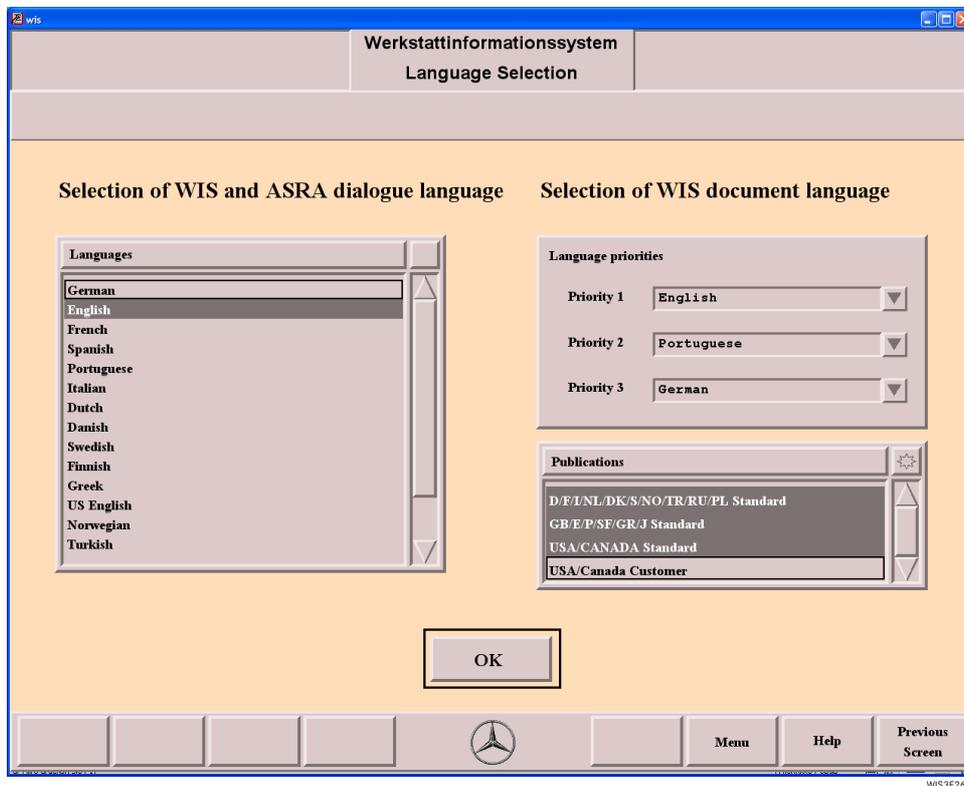
| | |
|---|---|
| **Selection of WIS and ASRA dialogue language** | For setting the dialog language. |
| | ⓘ The setting simultaneously defines the user interface and contents language for ASRA. |
| **Selection of WIS document language** | For setting the language priority with regards to the document search and document language in WIS. |
| | **Example:** |
| | With the display in the illustration, English-language documents are looked for with first priority (Priority 1). |
| | If no English-language documents have been found in accordance with the document search criteria, Spanish-language documents are looked for (Priority 2). |
| | If no Spanish-language documents are found either, then German-language documents are looked for (priority 3) |
| | ⓘ If documents are to be looked for in one language only, then for the second and third language "not chosen " must be set. |
| | These settings do **<u>not</u>** have any effect on the ASRA data. |
| **Publications** | For selecting the desired publication/s. Only those publications which apply for the country selected are displayed. |
| | ⓘ The default setting when WIS is started for the first time is that all publications are taken into consideration. This is also the case if all publications are accidentally deactivated. A restriction is only made if one or more publications have been selected. |
| **OK** | Transfers the settings, closes the "Language Selection" mask and returns to the "System Administration". |

## 17        Tips and Tricks

The Tips and Tricks section is full of advice and ideas for working with WIS.

| Keyword | Tips and Tricks | |
|---|---|---|
| **ASRA Preface** | Changes and general information on the current ASRA version are described in the "Preface to ASRA". | 📖 see section "8.4 Preface to ASRA" |
| **ASSYST** | • Whether a vehicle has a service scope display or not is prese-lected automatically using the vehicle ident. number. If when you enter a model in the ASSYST mask the wrong hash is active, the selection can be changed accordingly.<br>• When printing the service sheet, the references are replaced by references to the maintenance manual. | 📖 see section "13.4 ASSYST - without service scope display".<br>📖 see section "13.5 ASSYST - with service scope display".<br>📖 see section "13.6 ASSYST PLUS"<br>📖 see section "13.8 Service sheet" |
| **Bookmark** | • A bookmark can be allocated for documents which are used frequently.<br>• A bookmark should be created for the **WIS fault report**. | 📖 see section "14.3 Bookmark"<br>📖 see section "6.6 Fault report" |
| **Damage code** | • When zooming in the Damage code illustration, the sensitive boxes are not active.<br>• To page between the damage code illustrations:<br>⌨ Alt + N = Next picture<br>⌨ Alt + P = Previous picture | 📖 see section "6.5 Zooming in the picture".<br>📖 see section "11.2 Damage Code 2" |
| **Delete** ⌨F2 | The Delete function button delete all selctions withing the mask displayed. | |
| **Delete** ⌨Entf | Deletes inputs in the input box selected. | 📖 see section "2.4.3 Input box" |
| **Design group directory** | The entries are sorted according to the so-called entry numbers. An entry number is the number of the first operation item in a sub-group.<br>After selecting the title "Contents of design groups", the selection list is **sorted**. The title corresponds to a toggle switch:<br>• Alphabetically<br>• According to the entry number (entry number = the number of the first operation item in a subgroup) | 📖 see section "12.2 ASRA Vehicle requirements" |
| **Documentation search unsuccessful** | • Make sure that the corresponding units are also selected in "Infobox 1".<br>• If the documentation search is not successful, the search focus should be extended in "Infobox 2" from function subgroups (e.g. 54.00) to function groups (e.g. 54).<br>  ⓘ If the function group is selected, all relevant function sub-groups are used automatically for the search.<br>• If necessary select more types of information in "Infobox 2".<br>• If necessary, carry out the search using the "Directory". | 📖 see section "5.1 Infobox 1"<br>📖 see section "5.2 Infobox 2"<br><br>📖 see section "9 Directory – WIS table of contents" |
| **Ending WIS** | WIS can be ended from any mask using the key combination ⌨ Alt + F4 . | |

| Fault report | • The following fault report forms are possible: <br>   – WIS fault report form <br>   – EPC fault report form <br>   – DAS fault report form <br>   – ASRA fault report form <br> • The fault report is called using the "Document number" *OF00.01-P-3001A*. The document number can be entered with or without hyphen. <br> • The fault report must be printed using the "Document Functions". It must be filled in corresponding to the complaint and sent to the fax number given. <br> • A bookmark should be created for the fault report. | 📖 see section "6.6 Fault report" <br><br><br><br><br><br><br> 📖 see section "14.3 Bookmark" |
|---|---|---|
| **Function group/ subgroup** | If no entry is marked in the Group selection list, then the "**All**" entry is marked automatically. The documentation search is then made using the function groups 00-99. | |
| **Help** F7 | • The **Help** F7 can be called from any mask in WIS. <br> • Help is integrated in WIS in PDF format, and contains the entire user documentation. The displayed Help is initially for the current mask. You can select any Help topic by using the navigation bar. <br> • If you wish to view a specific topic, you can use the "Index" in the navigation bar or the "Search" symbol. The Help mask can be printed out in part or in full as necessary. <br> • If you are unable to read the PDF file, PDF-Acrobat Reader can be installed using the WIS/ASRA DVD, directory *\WIS\ Readme\Reader*. | 📖 see section "2.7 Help" |
| **History function** | • The History function contains a list of the type, model or vehicle ident. numbers used last. <br> • A selection menu is opened by selecting the menu arrow which lists the last 30 entries (type, model or vehicle ident. number) which can be selected. <br> • These entries (type, model or vehicle ident. number) can also be accessed in the EPC using the F3 function key. | |
| **Individual combination of units possible in Infobox 1** | If you require **another combination** of model, engine and unit than that given in WIS, you can enter this by **manually overwriting** the data in the input box. A plausibility check is not made. However you can still carry out a document search. | 📖 see section "5.1 Infobox 1" |
| **Input box** | Inputs in the input boxes must be made without dots or hyphens. | |
| **Input of the vehicle ident. no.** | • **Input of the vehicle ident. no.** must be confirmed with Return. <br> • In the "Vehicle ident. number" input box, the input can be made with 3-6 digits and 14-17 digits. <br> • If 3-6 digits are entered, the range is recognized automatically. <br> • History function <br> The History function contains a list of the type, model or vehicle ident. numbers used last. <br>   – By selecting the menu arrow, a menu is opened in which the last 30 entries (type, model or vehicle ident. number) are highlighted for selection. <br>   – These entries (type, model or vehicle ident. number) can also be accessed in the EPC using the F3 function key. | 📖 see section "5.1 Infobox 1" |

| | | |
|---|---|---|
| **Keyboard shortcut** | The ⌈Alt⌋ key together with other keys calls **keyboard shortcuts**. E.g. ⌈Alt⌋ + N for next document.<br><br>ⓘ The letter mostly corresponds to the first letter of the action button. | |
| **Keyword catalog** | • The keyword catalog offers a search mechanism which determines the function group/function subgroup assosciation to technical terms.<br><br>• Abbreviations must be concluded with a comma (e.g. **AG**) as otherwise all entries are found which contain this letter combination (e.g. airb**ag**). | 📖 see section "5.2.1 Keyword catalog" |
| **Menu** | • The "Menu" action button enables you to move quickly between masks and functions e.g. from ASRA to "Infobox 1" for entering new search criteria.<br><br>• No data is transferred using "Menu", you just move between masks. | 📖 see section "15 Menu" |
| **More than 500 documents found** | • There may be no group selected in "Infobox 2" (make sure you not only enter the group in the input box but also mark the "Select" action button). Reduce the search to the groups required.<br><br>• Too many function groups have been selected. Reduce the search to the groups required.<br><br>• **All** types of information have been selected. Reduce the search to the groups required.<br><br>• By entering only part of the document title in the "Search for document title" input box within "Infobox 2", the search result is limited to the search term. | 📖 see section "5.2 Infobox 2" |
| **Print** | • All types of information can be printed.<br><br>• Portrait and landscape format can be printed.<br><br>• The "Print Functions" include the following additional functions for printing out wiring diagrams:<br>  – **Scale in %**<br>    For entering a scale in %.<br>    Example: If you wish to print out four pages with a scale of 100 %, the printout can be reduced to two pages if scaled to 50 %. The wiring diagram is then correspondingly smaller on the printout.<br>    On the other hand, a very small wiring diagram can be shown three times larger on the printout with a scale of 300 %.<br>  – **Fit To Page**<br>    The wiring diagram is scaled in such a way that the entire wiring diagram is printed out on one page. | 📖 see section "7.3 Print" |
| **Profi function** | If with the document display, the last page of the document is always jumped to, the Profi function is active. | 📖 see section "14.1 Profi select/deselect" |
| **Reference** | You can move quickly between references and figures using the ⌈+⌋ and ⌈−⌋ keys. | 📖 see section "2.4.11 Reference" |

| Search in displayed document | • The "Search" function is called using "Document Functions". The currently displayed document is searched by entering a search term or part of a term. A found search term is highlighted blue.<br>• In "Document Functions", you can use the action buttons to "Search backward" (ALT+K) and "Search forward" (ALT+F) in the document. | 📖 see section "7.6 Search" |
|---|---|---|
| Search in document title | • A search term or parts of a term (e.g. battery) can be entered in the "Infobox 2". The search term must form part of a document title (e.g. Checking battery charge). The document titles are filtered in the document selection list. The document selection list is restricted to those document titles in which the search term is found.<br>• You must make sure that the letter sequence exactly matches that in the document title. | 📖 see section "5.2 Infobox 2" |
| Search in entire document | • A search term or parts of a term can be entered in the "Infobox 2". The search term must form part of the contents of a document. The document contents are searched for the entered sequence of letters by means of a full-text search. Found terms are highlighted grey in the document.<br>• In "System Configuration", you can define whether or not terms found during the search are to be highlighted in this way. | 📖 see section "5.2 Infobox 2"<br><br>📖 see section "16.1 System Configuration" |
| Search not active | If no type of information has been selected in "Infobox 2", then the "Search" action button is not active.<br>ⓘ At least one type of information must be selected. | 📖 see section "5.2 Infobox 2" |
| Selections | A vehicle or function group definition is only made if the operating element (e.g. selection list, square,...) has been selected (**highlighted grey**). | |
| Sun | • The **sun** in selection lists activates/deactivates all list entries.<br>• Keyboard operation = Shift +*. | 📖 see section "2.4.6 Sun" |
| User information (OV) | Using the "**Directory**" function in "Infobox 1" and **User information (OV)**, the following information, amongst other, can be called:<br>• Contact person for technical questions regarding the workshop documentation<br>• Abbreviations used in the workshop documentation<br>• Overview of types and units, assembly overview<br>• Use of the electric wiring diagrams<br>• Meaning of the logos | 📖 see section "9 Directory – WIS table of contents". |
| Vehicle datacard | The **vehicle datacard** can only be displayed using the function "Add. functions/datacard" if the complete vehicle ident. no. has been entered in "Infobox 1" and there is a link to the EPC (Electronic Parts Catalog). | 📖 see section "14 Add. functions"<br>📖 see section "14.2 Datacard" |
| Vehicle definition | • If the vehicle ident. number is known, then use this.<br>• If a vehicle ident. number is not available, then select the model, engine and unit (highlighted grey).<br>• Make sure you make the right selection for body, unit for cars. | 📖 see section "5.1 Infobox 1" |

| Wiring diagram legend | • The wiring diagram legend can be shown/hidden using the document functions or the key combination <br> [Alt] + O = Legend off/on. | 📖 see section "7.5 Legend on/off" |
| | • The wiring diagram legend can be printed | 📖 see section "7.3 Print" |
| |    — by calling "Document Functions/Print", activating the "Cover page" square or | |
| |    — by calling references using "Document Functions/Reference".  The document "Legend of  wiring diagram ..." can be displayed and printed. | 📖 see section "7.4 Reference" |
| **Wiring diagram sensitive boxes** | • From type 220 there are sensitive boxes in the wiring diagram. | 📖 see section "6.4.3 Display Document Electrics/Pneumatics wiring diagrams" |
| | • Reference information is displayed after selecting a sensitive box (e.g. more wiring diagrams, arrangement and assignment of ground points, ...). | 📖 see section "6.5 Zooming in the picture" |
| | • The sensitive boxes are not active if you zoom in the illustration. | |
| **Wiring diagram, flashing arrow** | You can stop the flashing of the arrow by moving the mouse. | 📖 see section "6.4.3 Display Document Electrics/Pneumatics wiring diagrams" |
| **Wiring diagram, print** | You must perform the following steps: | 📖 see section "7.3 Print" |
| | • Call up "Document Functions/Print". | |
| | • The "Print Functions" include the following additional functions for printing out wiring diagrams: | |
| |    — **Scale in %** <br> For entering a scale in %. <br> Example: If you wish to print out four pages with a scale of 100 %, the printout can be reduced to two pages if scaled to 50 %. The wiring diagram is then correspondingly smaller on the printout. <br> On the other hand, a very small wiring diagram can be shown three times larger on the printout with a scale of 300 %. | |
| |    — **Fit To Page** <br> The wiring diagram is scaled in such a way that the entire wiring diagram is printed out on one page. | |
| **WIS search strategies** | Depending on the data available for the document search, the WIS user has various options of undertaking this. | 📖 see section "3 WIS search strategies" |
| **ZM value not to be overwritten** | If a ZM value is not to be overwritten in the "Operation item list", then the square in the "Time specified by foreman" is not activated in the Main menu/System Administration/System Configuration. | 📖 see section "16.1 System Configuration" |
| **Zoom** | When zooming in the Damage code illustration, the sensitive boxes in the illustration are not active. | 📖 see section "6.5 Zooming in the picture" |

# Index

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