

## Contents

<b>00 - Technical data</b>	<b>1</b>
<b>1 Safety precautions</b>	<b>1</b>
<b>2 Repair instructions</b>	<b>2</b>
2.1 Rules for cleanliness	2
2.2 General notes	2
2.3 Contact corrosion	2
2.4 ESD (electrostatic discharge) workplace	2
2.5 Routing and attachment of lines and wiring	3
<b>3 Battery</b>	<b>4</b>
3.1 Battery - general notes	4
3.2 Battery types	4
<b>4 Maintenance</b>	<b>5</b>
4.1 "Mandatory report" form	5
<b>5 Procedures for additional maintenance work</b>	<b>6</b>
5.1 Second battery A1	6
5.2 Personal danger alarm system	6
5.3 Fire extinguisher system	6
5.4 Emergency exit system	7
5.5 Running gear	7
<b>27 - Starter, current supply, CCS</b>	<b>9</b>
<b>1 Battery</b>	<b>9</b>
1.1 Safety measures and procedures to be followed	9
1.2 Electrical system and power supply for special security components	12
1.3 Exploded view - battery	19
1.4 Disconnecting and connecting battery	21
1.5 Removing and installing battery	23
1.6 Inspecting and classifying battery, 48 V A6	29
1.7 Charging second battery A1	30
1.8 Checking second battery A1	30
1.9 Removing and installing rear stop command light G955	30
<b>2 Voltage converter</b>	<b>32</b>
2.1 Exploded view - voltage converter	32
2.2 Removing and installing voltage converter	33
<b>3 Battery isolation relay J7</b>	<b>35</b>
3.1 Removing and installing battery isolation relay J7	35
<b>91 - Communication</b>	<b>37</b>
<b>1 Telephone system</b>	<b>37</b>
1.1 Removing and installing microphone unit in front roof module R164	37
1.2 Removing and installing aerial amplifier for mobile telephone R86	37
<b>2 Emergency services radio system</b>	<b>39</b>
2.1 Overview - emergency services radio system	39
2.2 Removing and installing emergency services radio system	40
<b>96 - Lights, bulbs, switches - interior</b>	<b>42</b>
<b>1 Personal danger alarm system</b>	<b>42</b>
1.1 Overview - personal danger alarm system	42
1.2 Checking function	50
1.3 Checking siren	51
1.4 Diagnosis of special security equipment	52
1.5 Checking voltage of batteries	53

1.6	Assignment of buttons on operating unit with buttons for special functions EX42/switch module 1 in centre console EX23 .....	54
1.7	Removing and installing personal danger alarm system .....	55
<b>2</b>	<b>Fire extinguisher system .....</b>	<b>61</b>
2.1	General notes .....	61
2.2	Overview - fire extinguisher system .....	62
2.3	Removing and installing extinguishing agent containers .....	68
2.4	Removing and installing fire extinguisher system control unit J475 .....	70
2.5	Fire extinguisher system maintenance guidelines .....	71
<b>3</b>	<b>Emergency exit system .....</b>	<b>73</b>
3.1	General notes .....	73
3.2	Overview - emergency exit system .....	74
3.3	Renewing jettison bolts .....	78
3.4	Removing and installing emergency exit control unit J1051 .....	78
3.5	Renewing battery in emergency exit control unit J1051 .....	79
<b>4</b>	<b>Accident data recorder (ADR) .....</b>	<b>81</b>
4.1	Overview - accident data recorder (ADR) .....	81
4.2	General information and function .....	83
4.3	Deleting manually stored events .....	84
4.4	Checking function of accident data recorder G396 .....	85
4.5	Removing and installing accident data recorder G396 .....	87
<b>5</b>	<b>Emergency fresh air system .....</b>	<b>88</b>
5.1	General information and function .....	88
5.2	Overview - emergency fresh air system .....	88
5.3	Removing and installing oxygen tanks .....	91
<b>6</b>	<b>Convoy display .....</b>	<b>92</b>
6.1	General notes .....	92
6.2	Overview - convoy display .....	92
<b>7</b>	<b>Front, mirror and rear flashing lights .....</b>	<b>94</b>
7.1	General notes .....	94
7.2	Overview - front, mirror and rear flashing lights .....	94
7.3	Removing and installing flashing lights .....	99
<b>97 - Wiring .....</b>		<b>102</b>
<b>1</b>	<b>Electronics box in luggage compartment .....</b>	<b>102</b>
1.1	Overview of fitting locations - relay carriers, fuse carriers, electronics boxes .....	102
1.2	Exploded view - relay and fuse carriers for special vehicles .....	104
1.3	Removing and installing relay and fuse carriers for special vehicles .....	106
1.4	Removing and installing warning buzzer switch E296 .....	107
1.5	Removing and installing terminal 40 wiring junction 2 TV67 .....	108
1.6	Removing and installing terminal 30 wiring junction 3 TV28 .....	109
<b>2</b>	<b>Fitting locations, fuse assignment .....</b>	<b>111</b>
<b>3</b>	<b>Releasing and dismantling connector housings .....</b>	<b>112</b>
<b>4</b>	<b>Cleaning contact surfaces .....</b>	<b>113</b>
<b>5</b>	<b>Repairing aerial wires .....</b>	<b>114</b>
<b>6</b>	<b>Fibre optic cables .....</b>	<b>115</b>
<b>7</b>	<b>Vehicle diagnostic, testing and information systems .....</b>	<b>116</b>