



Contents

00 - Technical data	1
1 Tipper body (Henschel)	1
1.1 Data	1
2 Box body (Junge)	2
2.1 Data	2
3 Box body (Spier)	4
3.1 Data	4
4 Box body (Schmitz Cargobull)	6
4.1 General information	6
4.2 Data	6
5 Tail lift (Sörensen)	7
5.1 General information	7
5.2 Data	8
6 Tail lift (BÄR - Cargolift)	11
6.1 General information	11
6.2 Data	12
7 Tail lift (Palfinger)	14
7.1 General information	14
7.2 Data	15
8 Design double tube bar	16
8.1 Safety notes	16
9 Hazard classification of high-voltage system	17
27 - Starter, current supply, CCS	18
1 Preparation for second battery	18
1.1 System overview – preparation for second battery	18
1.2 Overview of fitting locations – preparation for second battery	19
1.3 Removing and installing second battery charging circuit relay J713	21
1.4 Notes on function of second battery charging circuit relay J713	21
53 - Body - rear	23
1 Storage well liner and load compartment trim for rear lid	23
1.1 Assembly overview - storage well liner	23
1.2 Removing and installing storage well liner	24
1.3 Removing and installing load compartment for rear lid	24
2 Aluminium load compartment trim	26
2.1 General notes	26
2.2 Assembly overview - aluminium load compartment trim	26
2.3 Removing and installing load compartment trim, aluminium	28
3 Bracket and wing for single and twin tyres, tipper body	33
3.1 Assembly overviews - wing bracket	33
3.2 Removing and installing wing	36
3.3 Removing and installing wing bracket	37
61 - Convertible roof, hardtop, canopy	38
1 Hardtop	38
1.1 Assembly overview - hardtop	38
1.2 Removing and installing hardtop	39
1.3 Renewing adhesive film	40
1.4 Renewing seals	42
1.5 Removing and installing gas strut	42



1.6	Removing and installing vent window	42
66	- Exterior equipment	44
1	Tipper body (Henschel)	44
1.1	Load area	44
1.2	Hydraulic system	49
2	Tipper body (Schoon)	56
2.1	Load area	56
2.2	Hydraulic system	58
3	Box body (Junge)	64
3.1	Box body, exterior	64
3.2	Box body, rear	64
4	Box body (Spier)	68
4.1	Box body, exterior	68
4.2	Box body, rear	71
5	Box body (Schmitz Cargobull)	75
5.1	Box body, exterior	75
5.2	Box body, rear	79
6	Tail lift (Sørensen)	86
6.1	Platform	86
6.2	Hydraulic system	89
7	Tail lift (BÄR - Cargolift)	95
7.1	Platform	95
7.2	Hydraulic system	97
8	Tail lift (Palfinger)	105
8.1	Platform	105
8.2	Hydraulic system	107
9	Repairing box body	114
9.1	Repairing plywood panel	114
9.2	Repairing sandwich panel	117
9.3	Repairing transparent roof	129
10	Trim film and protective film	133
10.1	Assembly overview - protective film	133
10.2	Renewing protective films	135
11	Taxi roof sign preparation	140
11.1	Removing and installing taxi roof sign preparation	140
12	Taxi roof sign preparation	141
12.1	Removing and installing taxi roof sign preparation	141
13	Taxi roof sign preparation	142
13.1	Removing and installing taxi roof sign preparation	142
14	Roof spoiler	143
14.1	Removing and installing roof spoiler	143
15	Mounting bracket for towing bracket	145
15.1	Assembly overview - mounting bracket for towing bracket	145
15.2	Removing and installing mounting bracket for towing bracket	146
16	Roof basket	147
16.1	Assembly overview - roof basket	147
16.2	Removing and installing roof basket	149
17	Storage box on drop-side	151
17.1	Assembly overview - storage box on drop-side	151
17.2	Removing and installing storage box on drop-side	152
18	Cross strut	153
18.1	Assembly overview - cross strut	153



18.2	Removing and installing cross strut	155
19	Storage box under drop-side	158
19.1	Assembly overview - storage box bracket	158
19.2	Removing and installing bracket for storage box	163
20	Side underbody guard	164
20.1	Assembly overview - side underbody guard	164
20.2	Removing and installing side underbody guard	165
21	Storage compartment	166
21.1	Assembly overview - storage compartment	166
21.2	Removing and installing storage compartment	167
22	Ladder carrier	168
22.1	Assembly overview - ladder carrier	168
22.2	Removing and installing ladder carrier	171
23	Roof carrier system with securing device	173
23.1	Assembly overview - roof carrier system with securing device	173
23.2	Removing and installing roof carrier system with securing device	174
24	Easy Entry, right rear wing door	175
24.1	Assembly overview – Easy Entry, right rear wing door	175
24.2	Removing and installing Easy Entry, right rear wing door	175
25	Underbody guard (protection package)	178
25.1	Assembly overview - underbody guard (protection package)	178
25.2	Removing and installing underbody guard (protection package)	180
26	Roof ventilator	182
26.1	Assembly overview - roof ventilator	182
26.2	Removing and installing roof ventilator	183
27	Ladder support	185
27.1	Assembly overview - ladder support	185
27.2	Removing and installing ladder support	186
28	Design double tube bar	188
28.1	Assembly overview - design double tube bar	188
28.2	Removing and installing design double tube bar	191
28.3	Installation instructions - design double tube bar	192
29	Load compartment partition	197
29.1	Assembly overview - load compartment partition	197
29.2	Removing and installing locking device	198
29.3	Removing and installing grille	198
29.4	Removing and installing frame	198
30	Loading edge protection	199
30.1	Assembly overview - loading edge protection	199
30.2	Removing and installing loading edge protection	200
31	Loading edge protection	204
31.1	Removing and installing loading edge protection	204
32	Load compartment cover, aluminium	205
32.1	Assembly overview - load compartment cover	205
32.2	Removing and installing load compartment cover	206
32.3	Removing and installing gas strut	206
32.4	Removing and installing hinge for load compartment cover	207
33	Protective grille for rear window	208
33.1	Assembly overview - protective grille for rear window	208
33.2	Removing and installing protective grille for rear window	209
33.3	Removing and installing retaining bracket	209
34	Rail system for load bed	210
34.1	Assembly overview - rail system	210



34.2	Removing and installing cross bars	212
34.3	Removing and installing retaining brackets for cross bars	212
34.4	Removing and installing guide rails	212
35	Side bar	214
35.1	Assembly overview - side bars	214
35.2	Removing and installing side bar	216
35.3	Removing and installing bracket for side bar	217
35.4	Removing and installing step panel	218
36	Fuel tank skid plate	219
36.1	Assembly overview - fuel tank skid plate	219
36.2	Removing and installing underbody guard for fuel tank	220
37	Bumper trim	221
37.1	Assembly overview - bumper trim	221
37.2	Removing and installing bumper trim	221
38	Towing bracket (for Australia only)	223
38.1	Assembly overview – towing bracket	223
38.2	Removing and installing towing bracket	224
39	Roof load carrier	225
39.1	Assembly overview - roof rails/cross bars	225
39.2	Assembly overview - ladder holder	226
39.3	Assembly overview - loading roller with holder	227
39.4	Removing and installing roof rails	229
39.5	Removing and installing cross bars	229
39.6	Removing and installing ladder holder	230
39.7	Removing and installing loading roller with holder	230
40	Underbody protection	231
40.1	Assembly overview – skid plate	231
40.2	Removing and installing skid plate	232
41	Cross bars	233
41.1	Assembly overview – cross bars	233
41.2	Removing and installing cross bars	233
68	Interior equipment	235
1	Box body (Junge)	235
1.1	Removing and installing fastening rail	235
1.2	Removing and installing securing strap recesses	237
1.3	Removing and installing pull strap	237
2	Box body (Spier)	239
2.1	Removing and installing fastening rail	239
2.2	Removing and installing securing strap recess	240
2.3	Pull strap	241
3	Box body (Schmitz Cargobull)	242
3.1	Removing and installing roof cross strut	242
3.2	Removing and installing fastening rail	243
3.3	Removing and installing pull strap	244
4	Equipment	246
4.1	Universal floor	246
4.2	Removable floor panel	250
4.3	Roof carrier in load compartment	250
4.4	Removing and installing grab handle, A-pillar	252
4.5	Partition panel (Holland double cab)	252
5	Box body (Plus)	257
5.1	Assembly overview - box body (Plus)	257
5.2	Removing and installing seat bench padding	263



5.3	Removing and installing upper partition	263
5.4	Removing and installing lower partition	264
5.5	Removing and installing connection to side panel	266
5.6	Removing and installing side panel	266
5.7	Removing and installing sliding door step	267
5.8	Removing and installing front and rear bench trim	268
5.9	Removing and installing bench seat	270
5.10	Removing and installing floor items	270
5.11	Removing and installing headliner	271
5.12	Removing and installing roof items	272
6	Tool cabinet	274
6.1	Assembly overview - tool cabinet	274
6.2	Removing and installing tool cabinet	277
7	Fastening rails	280
7.1	Assembly overview - fastening rails	280
7.2	Removing and installing fastening rail	281
8	Load bed covering, wood	286
8.1	Assembly overview - load bed covering, wood	286
8.2	Removing and installing load bed covering, wood	287
9	C-pillar partition	289
9.1	Assembly overview - C-pillar partition	289
9.2	Removing and installing C-pillar partition	290
10	Rear window protective grille	295
10.1	Assembly overview - rear window protective grille	295
10.2	Removing and installing rear window protective grille	295
11	Partition grille	297
11.1	Removing and installing partition grille	297
11.2	Removing and installing partition grille reinforcement	298
11.3	Removing and installing bracket for partition grille reinforcement bracket	299
11.4	Removing and installing partition grille bracket adapter	301
12	Partition grille	302
12.1	Assembly overview – partition grille	302
12.2	Removing and installing partition grille	303
13	Tool box for load bed	305
13.1	Assembly overview - tool box	305
13.2	Removing and installing tool box	306
14	Wheel housing trim	307
14.1	Assembly overview – wheel housing trim	307
14.2	Removing and installing wheel housing trim	307
15	Stowage cases on wing door	309
15.1	Assembly overview - stowage cases	309
15.2	Removing and installing stowage cases	310
15.3	Removing and installing brackets for stowage cases	310
16	Floor ventilation, load bed	311
16.1	Assembly overview - floor ventilation	311
16.2	Removing and installing floor ventilation	312
17	High load floor with drawers	313
17.1	Assembly overview - high load floor with drawers	313
17.2	Removing and installing load floor, upper part	315
17.3	Removing and installing load floor, lower part	316
17.4	Removing and installing frame for drawers	317
18	Storage compartment on wheel housing	318
18.1	Assembly overview - storage compartment on wheel housing	318



18.2	Removing and installing storage compartment	319
19	Protective grille on wing door	320
19.1	Assembly overview - protective grille on wing door	320
19.2	Removing and installing protective grille	321
20	Interior mirror	322
20.1	Removing and installing mirror taximeter G511	322
21	Interior mirror	323
21.1	Removing and installing interior mirror, mirror taximeter G511	323
22	Interior mirror	324
22.1	Removing and installing interior mirror, mirror taximeter G511	324
69	Passenger protection	325
1	Seat belts	325
1.1	Removing and installing front three-point seat belt, bench seat (Holland double cab)	325
1.2	Removing and installing belt buckle, bench seat (Holland double cab)	326
70	Trim, insulation	328
1	Interior trims	328
1.1	Removing and installing bench seat trim (Holland double cab)	328
1.2	Removing and installing sliding door trim (Holland double cab)	328
72	Seat frames	330
1	Bench seats	330
1.1	Removing and installing bench seat (Holland double cab)	330
74	Seat - padding, covers	331
91	Communication	332
1	Fitting locations	332
1.1	Overview of fitting locations of components/control units in front section of the vehicle (taxi)	332
2	Fitting locations	333
2.1	Overview of fitting locations of components/control units in front section of the vehicle (taxi)	333
3	Sound system	334
3.1	Overview of fitting locations – sound system	334
3.2	Removing and installing two-way radio loudspeaker R25	335
4	Aerial systems	336
4.1	Removing and installing roof aerial R295	336
5	Aerial systems	337
5.1	Removing and installing roof aerial RX5	337
6	Aerial systems	338
6.1	Removing and installing roof aerial R295	338
7	Aerial systems	339
7.1	Removing and installing roof aerial R295	339
8	Aerial systems	340
8.1	Removing and installing roof aerial R295	340
9	Taximeter	341
9.1	Removing and installing taximeter G41	341
9.2	Removing and installing mounting for taximeter G41	342
9.3	Removing and installing centre console cover with mounting for taximeter G41	342
10	Taximeter	343
10.1	Removing and installing taximeter G41	343
10.2	Removing and installing mirror taximeter G511	343



11	Taximeter	346
11.1	Removing and installing taximeter G41	346
11.2	Removing and installing mirror taximeter G511	347
12	Two-way radio	350
12.1	Assembly overview – two-way radio	350
12.2	Removing and installing two-way radio R8	351
12.3	Removing and installing two-way radio bracket	351
12.4	Removing and installing two-way radio unit microphone R122	351
13	Two-way radio	352
13.1	Removing and installing two-way radio R8	352
13.2	Removing and installing microphone 2 on driver side R225	352
13.3	Removing and installing two-way radio loudspeaker R25	353
14	Two-way radio	354
14.1	Removing and installing two-way radio R8	354
14.2	Removing and installing 2-way radio unit microphone R122 , vehicles with panoramic sunroof	354
14.3	Removing and installing 2-way radio unit microphone R122 , vehicles without panoramic sunroof	355
14.4	Removing and installing two-way radio loudspeaker R25	355
94	Lights, bulbs, switches - exterior	356
1	Tipper body (Henschel)	356
1.1	Lights	356
1.2	Electrical system, general	358
2	Tipper body (Schoon)	362
2.1	Electrics	362
3	Box body (Junge)	366
3.1	Removing and installing tail light MX3 / MX4	366
3.2	Removing and installing rear fog light L46 / L47	367
3.3	Removing and installing number plate light X4 / X5	367
3.4	Removing and installing additional brake light M25	368
3.5	Removing and installing upper marker lights	368
3.6	Removing and installing side marker light M33 / M34 / M37 / M38 / M39 / M40 with bracket	368
3.7	Removing and installing lower marker light	369
4	Box body (Spier)	370
4.1	Removing and installing tail light MX3 / MX4	370
4.2	Removing and installing number plate light X4 / X5	370
4.3	Removing and installing high-level brake light	371
4.4	Removing and installing upper marker lights	371
4.5	Removing and installing side marker light M33 / M34 / M37 / M38 / M39 / M40	371
5	Box body (Schmitz Cargobull)	373
5.1	Removing and installing tail light cluster	373
5.2	Removing and installing number plate light	374
5.3	Removing and installing high-level brake light	374
5.4	Removing and installing rear upper marker light	375
5.5	Removing and installing front upper marker light	376
5.6	Removing and installing side marker light	376
6	Tail lift (Sörensen)	378
6.1	Removing and installing hazard warning light M115/M116	378
6.2	Removing and installing foot switch F558	378
6.3	Removing and installing tail lift operating unit EX56	379
6.4	Removing and installing tilt angle sensor	379
7	Tail lift (BÄR - Cargolift)	381
7.1	Removing and installing hazard warning light M115/M116	381



7.2	Removing and installing foot switch F556/F557	382
7.3	Removing and installing operating unit EX56	383
7.4	Removing and installing foot switch unit F558	383
8	Tail lift (Palfinger)	386
8.1	Removing and installing hazard warning light	386
8.2	Removing and installing foot controls	386
8.3	Removing and installing tilt switch	387
8.4	Removing and installing angle sensor	387
8.5	Removing and installing control box	387
9	Roof spoiler elevated side light	389
9.1	Removing and installing roof spoiler elevated side light	389
10	Cross strut/tarpaulin lighting	390
10.1	Removing and installing cross strut/tarpaulin lighting	390
11	Cross strut/tarpaulin wiring harness	391
11.1	Removing and installing cross strut/tarpaulin wiring harness	391
12	LED rotating light	392
12.1	Removing and installing LED rotating light	392
13	Taxi roof sign	393
13.1	Assembly overview – taxi roof sign	393
13.2	Removing and installing taxi roof sign J1066	394
13.3	Removing and installing bracket for taxi roof sign J1066	395
14	Taxi roof sign	396
14.1	Assembly overview – taxi roof sign	396
14.2	Removing and installing taxi roof sign J1066	397
14.3	Removing and installing bracket for taxi roof sign J1066	398
15	Taxi roof sign	399
15.1	Assembly overview – taxi roof sign	399
15.2	Removing and installing taxi roof sign J1066	400
15.3	Removing and installing bracket for taxi roof sign J1066	401
96	Lights, bulbs, switches - interior	402
1	Box body (Junge)	402
1.1	Removing and installing load area illumination switch E481	402
1.2	Removing and installing interior lighting	402
2	Box body (Spier)	403
2.1	Removing and installing load area illumination switch E481	403
2.2	Removing and installing interior lighting	403
3	Box body (Schmitz Cargobull)	404
3.1	Removing and installing interior lighting	404
4	Tail lift (Sörensen)	406
4.1	Tail lift switch E629	406
5	Tail lift (BÄR - Cargolift)	407
5.1	Tail lift switch E629	407
6	Tail lift (Palfinger)	408
6.1	Tail lift switch	408
7	Controls	409
7.1	Overview of fitting locations - controls in dash panel, Taxi	409
7.2	Removing and installing interior light switch (taxi) E115	409
7.3	Removing and installing taxi sign switch E138	410
7.4	Removing and installing alarm system off switch E217	410
7.5	Removing and installing hands-free system button E487	410
8	Controls	411
8.1	Removing and installing taxi alarm active button E485	411



8.2	Removing and installing passive taxi alarm button E580	411
8.3	Removing and installing switch module 2 in dash panel, next to steering wheel EX44	412
9	Controls	413
9.1	Removing and installing taxi alarm active button E485	413
9.2	Removing and installing passive taxi alarm button E580	413
9.3	Removing and installing taxi alarm off button E486	414
9.4	Removing and installing switch module for taxi functions EX62	414
10	Controls	415
10.1	Removing and installing taxi alarm active button E485	415
10.2	Removing and installing taxi alarm off button E486	415
10.3	Removing and installing passive taxi alarm button E580	416
10.4	Removing and installing centre switch module 2 in dash panel EX35	416
11	Anti-theft alarm	417
11.1	Assembly overview - treble horn H2	417
11.2	Removing and installing treble horn H2	418
12	LED spot lights	419
12.1	Assembly overview - LED spot lights	419
12.2	Removing and installing LED spot lights	420
13	Cigarette lighter, socket	422
13.1	Assembly overview - DC/AC converter/socket	422
13.2	Removing and installing DC/AC converter with socket, 12 V-230 V U13	423
13.3	Overview of fitting locations - 230 V components	425
13.4	Assembly overview - exterior socket, 230 V, 110 V U8	426
13.5	Assembly overview - interior socket, 230 V, 110 V U11	427
13.6	Assembly overview - 220 V automatic personnel protection circuit breaker S59	428
13.7	Removing and installing interior socket, 230 V, 110 V U11	429
13.8	Removing and installing 220 V automatic personnel protection circuit breaker S59	433
13.9	Removing and installing exterior socket, 230 V, 110 V U8	434
13.10	Removing and installing battery charger, 230 V or 110 V/12 V A10	436
13.11	Removing and installing DC/AC converter with socket, 12 V-230 V U13	439
97 - Wiring		441
1	Control units	441
1.1	Removing and installing special vehicle control unit J608	441
2	Control units	443
2.1	Removing and installing special vehicle control unit J608	443