

The next part of the harness are the wires to the door guard light. The harness is attached to the body with a small metal clip, shown in the picture below:



To take the door guard light out you have to reach inside the door and push the small plastic clips on the light housing. You can then just gently pull the housing of the bulb itself:



The bulb and housing can be found on the Pet page below, whereas the rubber water protection cap is shown on the PET page at the beginning of this chapter:

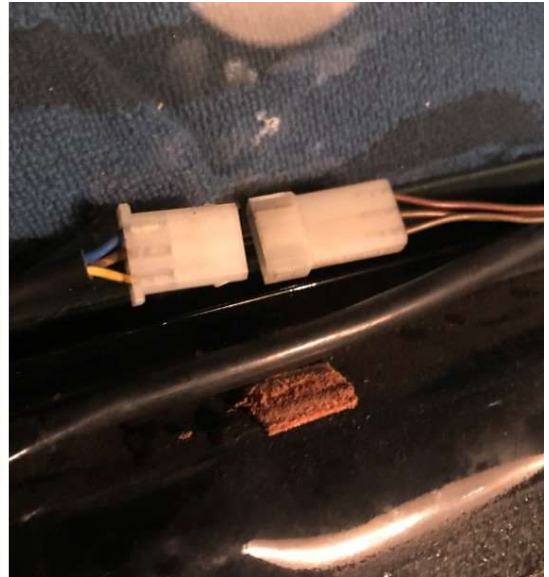
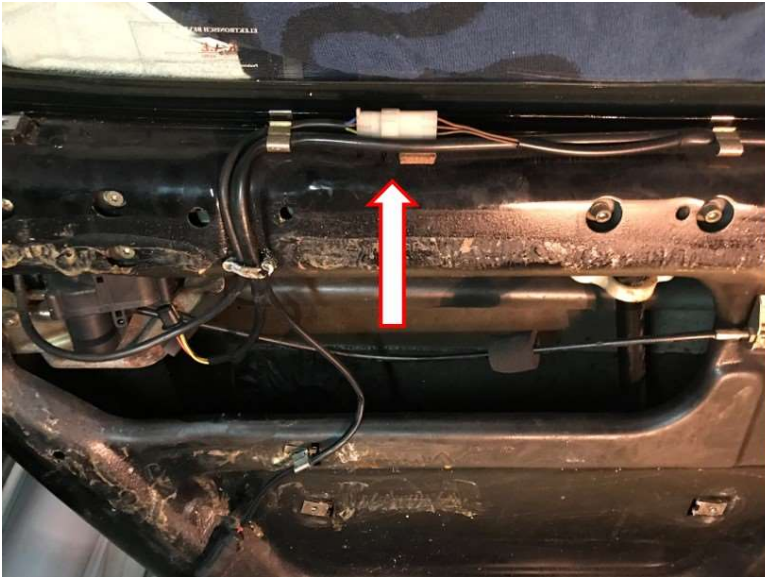
Model	Year	MG	SG	Illustration	Restrictions	UPD	9:50	29.01.2010	PORSCHE	PET	PORSCHE
928	1991	9	05	905-15		248					

Pos	Part Number	Description	Remark	Qty	Model
		interior lights			
1	911 632 102 00	light front rear rear lid		3	
2	900 631 106 90	linolite lamp 12 V - 10 W		3	
3	928 632 101 00	glove compartment light		1	
4	999 631 018 90	bulb 12 V - 3 W		1	
(7)	928 632 105 01	engine compartment lamp	-90	1	
7A	928 632 111 01	light	91-	1	
7B	928 632 113 00	cap	91-	1	
7C	928 632 112 00	protection cap	91-	1	
8	900 631 115 90	bulb 12 V - 10 W		1	
9	N 013 970 5	tapping screw 8,4 X 9,5	-90	1	
9	N 106 568 02	tapping screw 8,4 X 9,5		1	
(9)	900 143 164 02	combination screw 8Z 4,2 X 13 Z1	91-	1	
-	999 507 050 40	expander nut	91-	1	
10	928 613 147 00	door contact switch		2	
11	321 971 905	rubber sleeve		2	
12	900 031 001 60	washer 8,4		2	
13	964 613 601 00	door contact switch		2	
14	928 613 119 00	door contact switch		1	
-	900 631 102 90	bulb 12 V - 2 W ashtray light		1	
16	928 631 131 00	door guard light		2	
17	900 631 120 90	bulb 12 V - 2 W		2	

Next disconnect the wires for the contact switch, located just below the window:

Model	Year	MG	SG	Illustration	Restrictions	UPD	Model	Year	MG	SG	Illustration	Restrictions	UPD
928	1991	8	04	804-05		2	928	1991	8	04	804-05		2

Pos	Part Number	Description	Remark	Qty	Model
45	900 076 010 02	hexagon nut M 6		4	
46	N 012 006 4	lock ring B 6		4	
47	N 014 761 2	pan-head screw M 6 X 12		4	
48	N 012 226 5	spring washer A 6		4	
49	928 537 140 03	connecting rod		1	
50	928 537 111 04	operating rod		2	
51	928 537 531 03	desk pad		2	
52	928 537 633 05	door lock cylinder with stipulated lock number without key state lock number Pos 53 use also:		2	
52	928 537 903 02	door lock cylinder with 1 key w/o stipulated lock number Pos 53 use also:		2	
53	928 537 713 02	contact switch	/L	1	
53	928 537 714 02	contact switch	/R	1	
54	928 537 493 02	compression spring		2	
55	928 537 495 03	gasket		2	
56	928 538 033 02	key state lock number with stipulated lock number Information available		3	
57	944 538 431 00	key cap		2	
58	944 538 041 00	key lamp		2	
59	944 538 443 00	crest		2	
60	000 043 204 21	grease for lock cylinder		X	
61	928 537 747 00	luminous point		2	



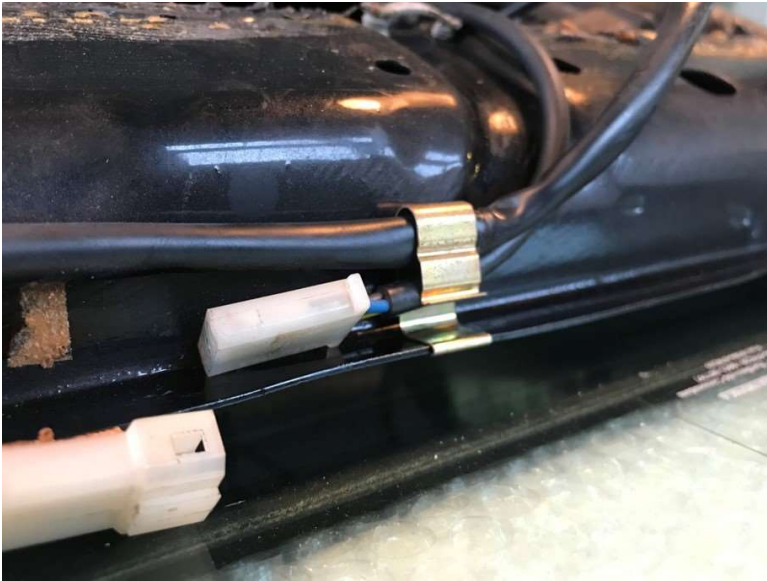
You can now start to remove the grey plastic clips that hold the harness to the vertical part of the door frame. There are 4 in total as shown on the picture below, and I have only been able to save 1 sort of 'intact':



Remove the 4 clamps that hold the harness to the top of the door frame, as shown in the picture below:



I found the easiest way is to just slide the clamp of the door frame first, and then pull it off the harness.

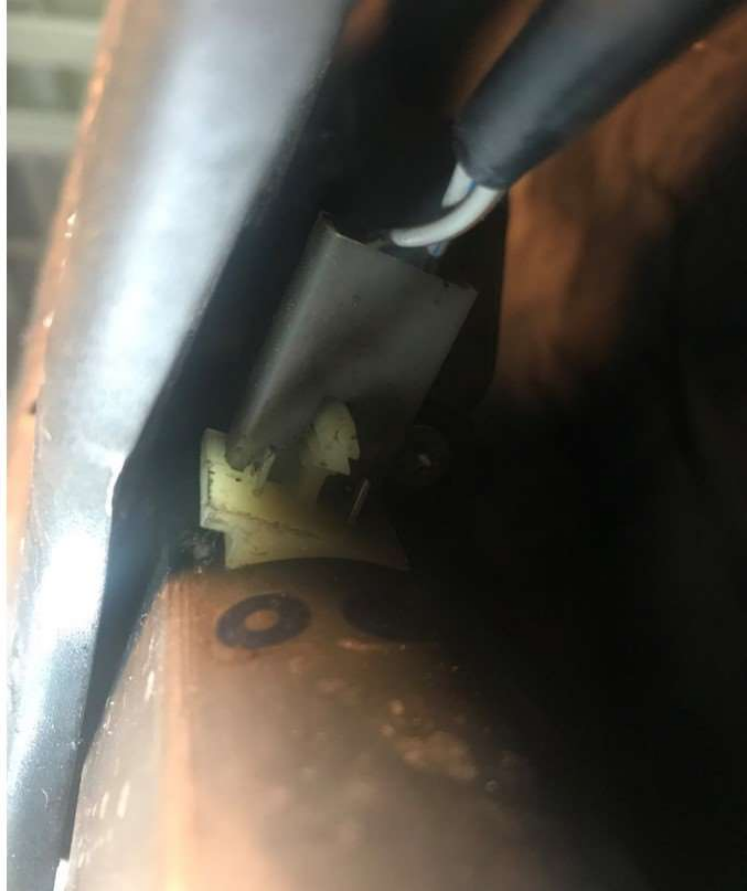


Both clamp and clip are not shown on PET '91 (only the grey clipp's part no. is mentioned), but they are on PET '82:

Model	Year	MG	SG	Illustration	Restrictions	UPD	17:59	23.01.2010	PORSCHE		PET	PORSCHE
928	1982	8	04	804-10		248						

Pos	Part Number	Description	Remark	Qty	Model
		central locking system			
1	928 537 471 02	vacuum line red	/L	-79 1	
2	928 537 472 02	vacuum line red	/R	-79 1	
-	928 025 305 03	hose 2,6 X 1,7 red		-79 *	
3	-	40 MM		-79 2	
4	-	350 MM		-79 2	
5	928 537 473 02	vacuum line blue		-79 1	
7	928 574 723 02	vacuum line black 400 MM		-79 3	
10	928 537 475 02	vacuum line light green		-79 1	
11	928 537 476 02	vacuum line light green		-79 1	
14	928 537 447 02	vacuum line red		-79 1	
15	928 537 449 02	vacuum line light green		-79 1	
16	928 537 394 02	clamp		-79 8	
(16)	928 537 394 03	clamp		80- 8	
17	928 537 411 02	clip		-79 4	
-	999 911 227 40	base strap		-79 *	
18	-	915 MM		-79 2	
19	928 537 443 02	vacuum reservoir		-79 1	
20	900 075 145 02	hexagon-head bolt M 5 X 16		-79 2	
21	900 025 003 02	washer A 5,3		-79 4	
22	N 012 222 4	spring washer A 5		-79 2	

Next part of the harness is the connector for the window motor. It comes off the main harness just above the opening for the motor, and the connector is on top of the motor just inside of the opening. I used a flat screwdriver to carefully loosen the connector:



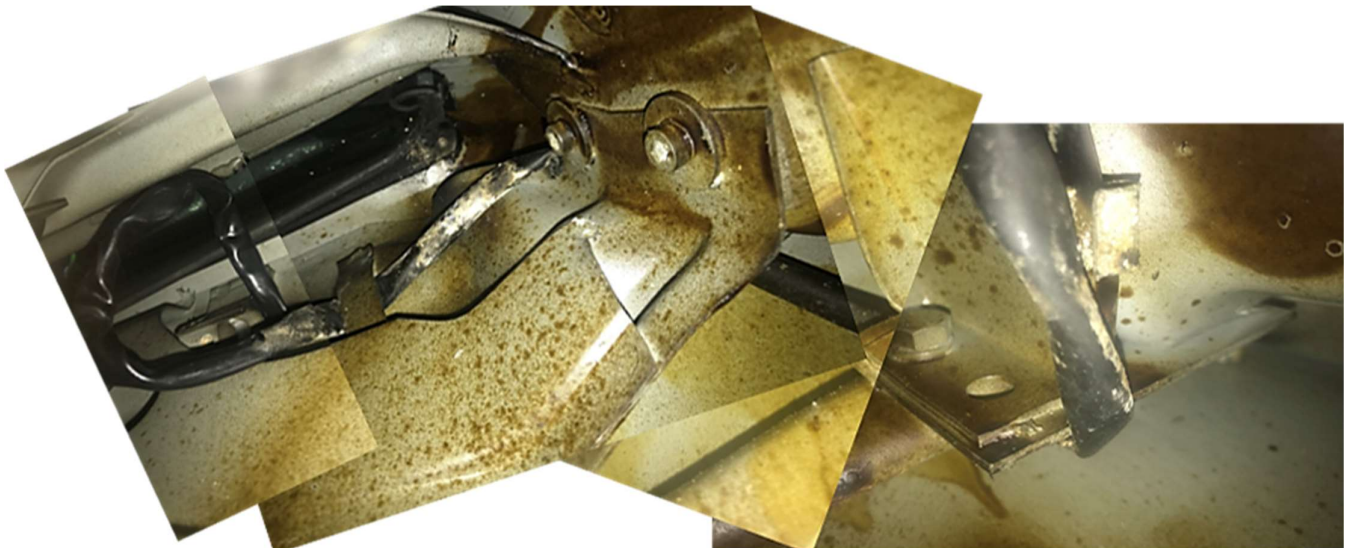
Last part of the harness to get out is the mirror harness. It disappears into the opening of the window motor and is held there by a small plastic clip:

Model	Year	MG	SG	Illustration	Restrictions	UPD	19:43	23.01.2010	PORSCHE	PET	PORSCHE
928	1991	9	02	902-11		248					

Pos	Part Number	Description	Remark	Qty	Model	Pos	Part Number	Description	Remark	Qty	Model
(2)	928 612 167 10	wiring harness	/LL	89	1 MS37						
(2)	928 612 167 16	wiring harness	/LL	90	1 MS37						
(2)	928 612 167 20	wiring harness	/LL	91	1 MS37						
(2)	927 612 167 01	wiring harness	/RL	-88	1 MS38						
(2)	927 612 167 05	wiring harness	/RL	89	1 MS38						
(2)	928 612 167 16	wiring harness	/RL	90	1 MS38						
(2)	928 612 167 19	wiring harness	/RL	91	1 MS38						
3	928 555 551 02	cable guide		2							
4	999 659 002 50	water protection cap		2							
5	928 612 131 00	connector housing		2							
		mounting parts									
-	477 971 851	cable clip		4							
-	928 537 411 02	cable clamp grey		4							

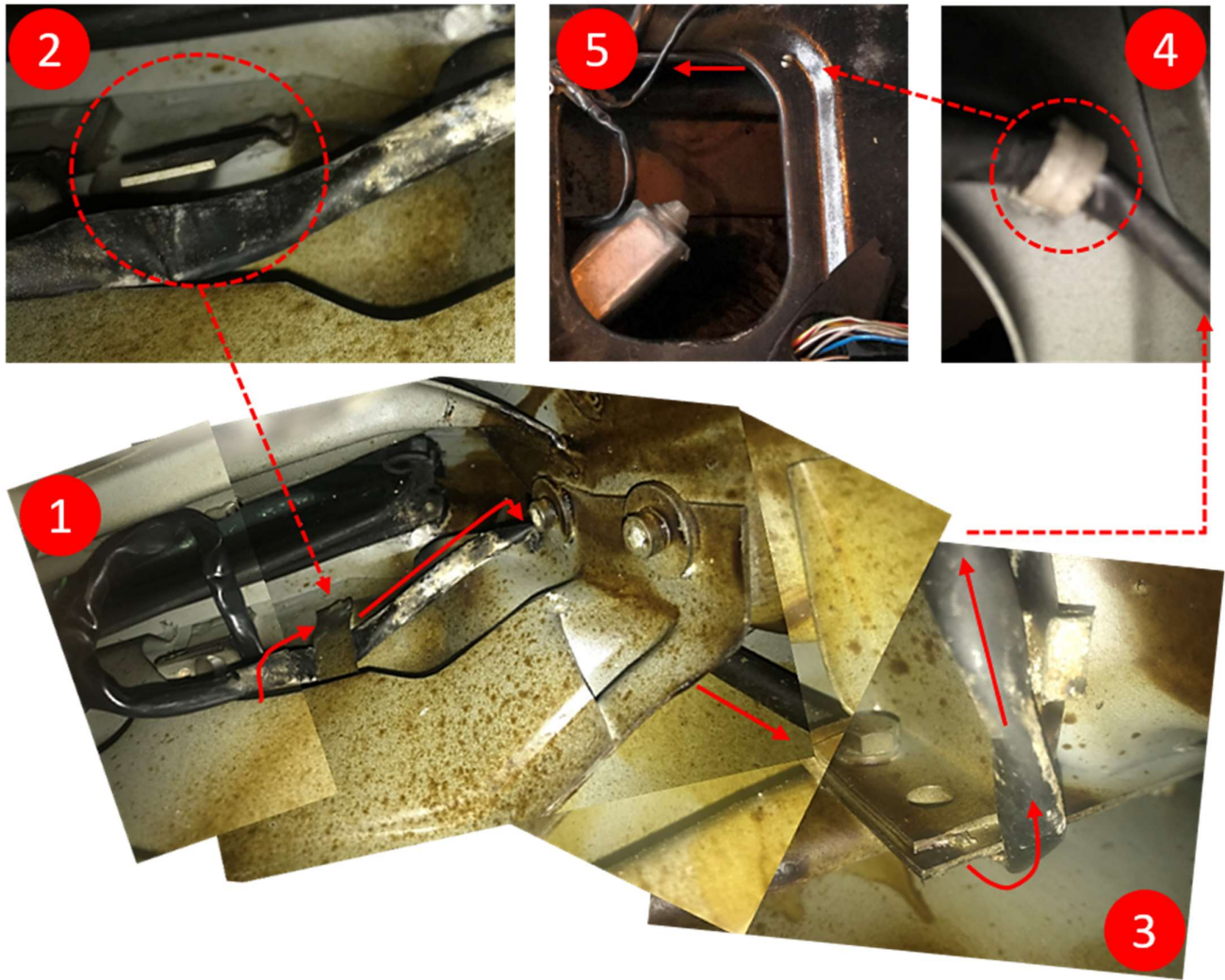


Below is a picture combined of several photo's I took to show the exact routing of the mirror harness:



On the next page is the same picture but with a few additions and explanation. It may take you a minute to understand what the hell I tried to do but just follow the arrows and you'll be fine...:-).....:

1. The "loop" of wiring harness shown below and to the right of nr. 1 is normally not there: I pulled the mirror harness back into the door a good 10 centimeters to be able to move it around inside.
2. Nr. 2 shows a metal lid that holds the harness down just forward of the entry point. You can easily bend it upwards to free the harness. After this the harness runs underneath the bracket and also underneath the reinforcement bar (that on the other side holds the lock cover, see chapter 9).
3. Nr. 3 shows where the harness bends around the reinforcement bar and comes forward towards the opening for the window motor.
4. Nr. 4 shows the clip mentioned on the top of this page in place.
5. Nr. 5 shows the harness exiting the window motor opening.



After that the harness will be out:



6. Window Motor & lift mechanism:

Below the relevant Pet pages for reference:

Model	Year	MG	SG	Illustration	Restrictions	UPD	19:35	23.01.2010	PORSCHE	PET	PORSCHE
928	1991	8	04	804-15		248					

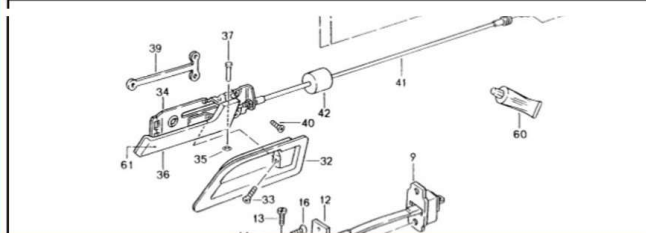
Pos	Part Number	Description	Remark	Qty	Model
1	928 537 075 06	power windows	/L	-90	1
(1)	928 537 076 06	power windows with engine and transmission	/R	-90	1
(1)	928 537 075 06	power windows with engine and transmission	/L	91	1
(1)	928 537 076 06	power windows with engine and transmission	/R	91	1
2	928 624 013 03	engine and transmission for window opener	/L	1	
(2)	928 624 014 03	engine and transmission for window opener	/R	1	
3	928 537 909 04	power windows without engine and transmission	/L	1	
(3)	928 537 910 04	power windows without engine and transmission	/R	1	
4	928 537 918 00	roller		2	
5	928 537 917 00	bolt		2	
6	N 010 210 13	hexagon-head bolt M 6 X 10		8	
7	N 012 226 5	spring washer A 6		8	
8	928 537 263 02	guide tube	/L	1	
(8)	928 537 264 02	guide tube	/R	1	
9	900 067 008 02	pan-head screw M 6 X 12		4	
10	900 151 007 02	washer B 7,4		4	
11	N 012 006 4	lock ring B 6		4	
12	928 537 259 02	slide lower	/L	2	

Model	Year	MG	SG	Illustration	Restrictions	UPD	19:35	23.01.2010	PORSCHE	PET	PORSCHE
928	1991	8	04	804-15		248					

Pos	Part Number	Description	Remark	Qty	Model	Pos	Part Number	Description	Remark	Qty	Model
(12)	928 537 260 02	slide lower	/R	2		29	999 049 008 40	plastic nut	90-	1	
13	928 537 289 02	slide upper	/L	2							
(13)	928 537 290 02	slide upper	/R	2							
14	900 075 016 02	hexagon-head bolt M 6 X 22		4							
15	N 011 524 7	washer B 6,4		4							
16	N 012 006 4	lock ring B 6		4							
17	928 537 319 03	sealing for door slot	/L	1							
(17)	928 537 320 03	sealing for door slot	/R	1							
18	928 537 321 03	sealing for door slot outer	/L	1							
18	928 537 322 03	sealing for door slot outer	/R	1							
19	928 537 323 03	window guide	/L	1							
(19)	928 537 324 03	window guide	/R	1							
-	999 920 004 02	u-clamp		10							
20	928 537 085 03	fleet angle		4							
21	N 014 761 2	pan-head screw M 6 X 12		4							
22	N 012 226 5	spring washer B 6		4							
23	999 025 108 02	washer 6,4		4							
24	928 537 285 02	insert		2							
25	999 093 004 02	hexagon-head bolt		6							
26	928 618 040 00	control unit	90-	1							
27	928 618 241 00	support	90-	1							
28	900 143 143 02	tapping screw B 4,2 X 16	90-	1							

To be able to remove the window motor and lift mechanism I needed to get the interior door handle out of the way first. Take the 3 screws (nr. 40 in the PET picture below) and make sure to also take out the nut lock that's on the inside and is held by the same 3 screws (nr. 39). You can then move the door handle to the side allowing you to eventually take the window motor and lift mechanism out through the opening.

Model	Year	MG	SG	Illustration	Restrictions	UPD	19:34	23.01.2010	PORSCHE	PET	PORSCHE
928	1991	8	04	804-05		248					

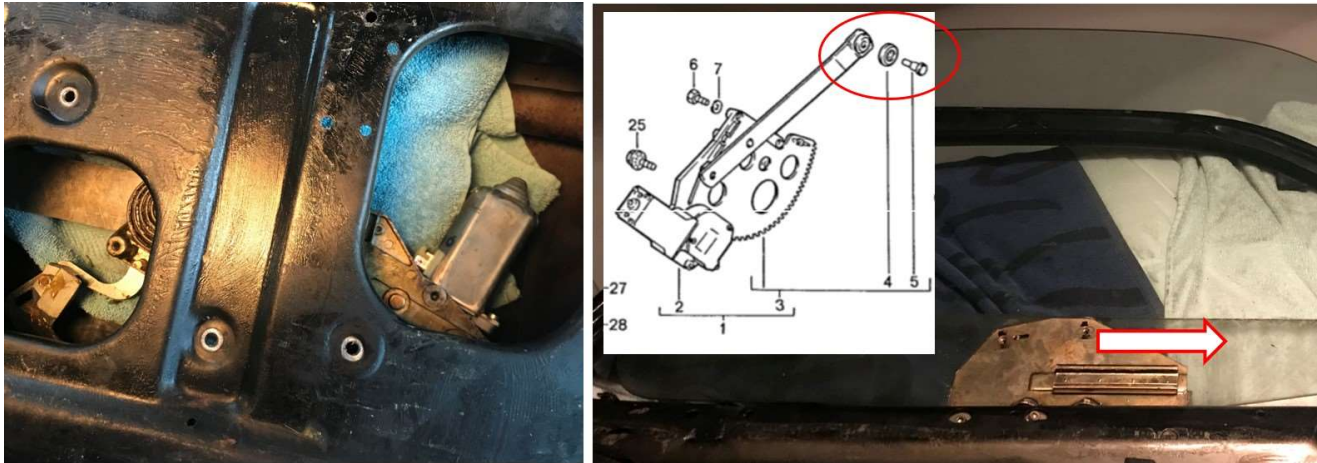
	35	999 591 242 01	speed nut D = 4,0		2
	36	928 537 169 00	interior handle 70B satin black	/L	1
	(36)	928 537 170 00	interior handle 70B satin black	/R	1
	37	928 537 557 02	bolt		2
	39	928 537 157 02	nut lock		2
	40	900 269 015 02	countersunk-head screw M 5 X 10		6



Unscrew the motor and lift mechanism by removing the 4 bolts shown below in the picture on the left. As I wanted to get the window guide tube out of the way as well before removing the motor and lift mechanism I put a towel below the motor to prevent any damage to the aluminum:



Move the motor and lift mechanism forward to free the roller from the guide rail. Lower them onto the towel and leave them there until the window guide tube is out:



7. Window guide tube, slides & felt guides:

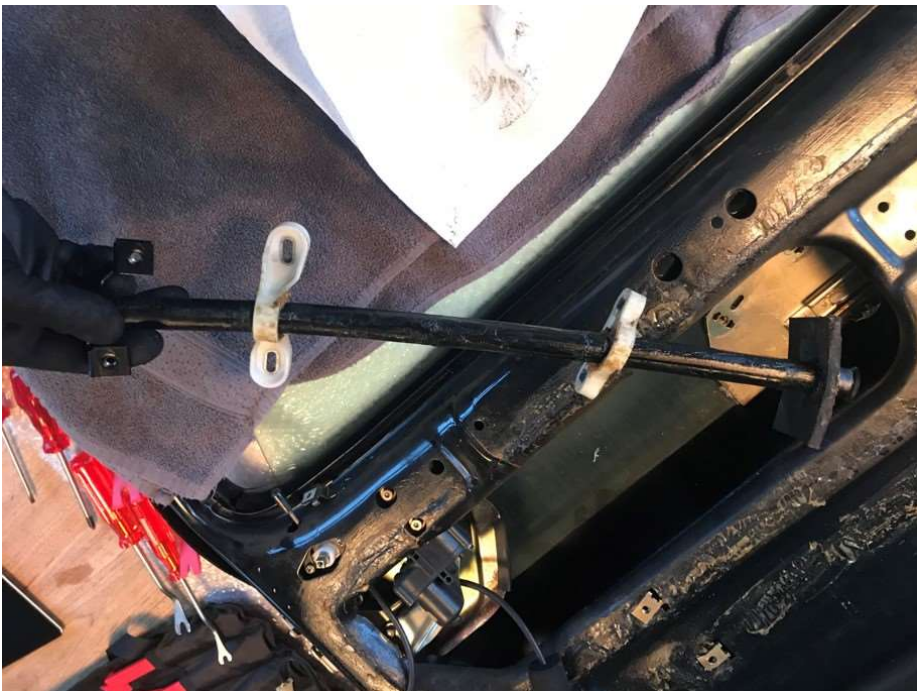
As there is nothing to hold the window in place you can slide it down a bit until the bolts keeping the lower slide in place are accessible. Remove the two bolts:



Slide the window down even further until you can see the two bolts that attach the upper slide to the window. Remove these bolts as well:



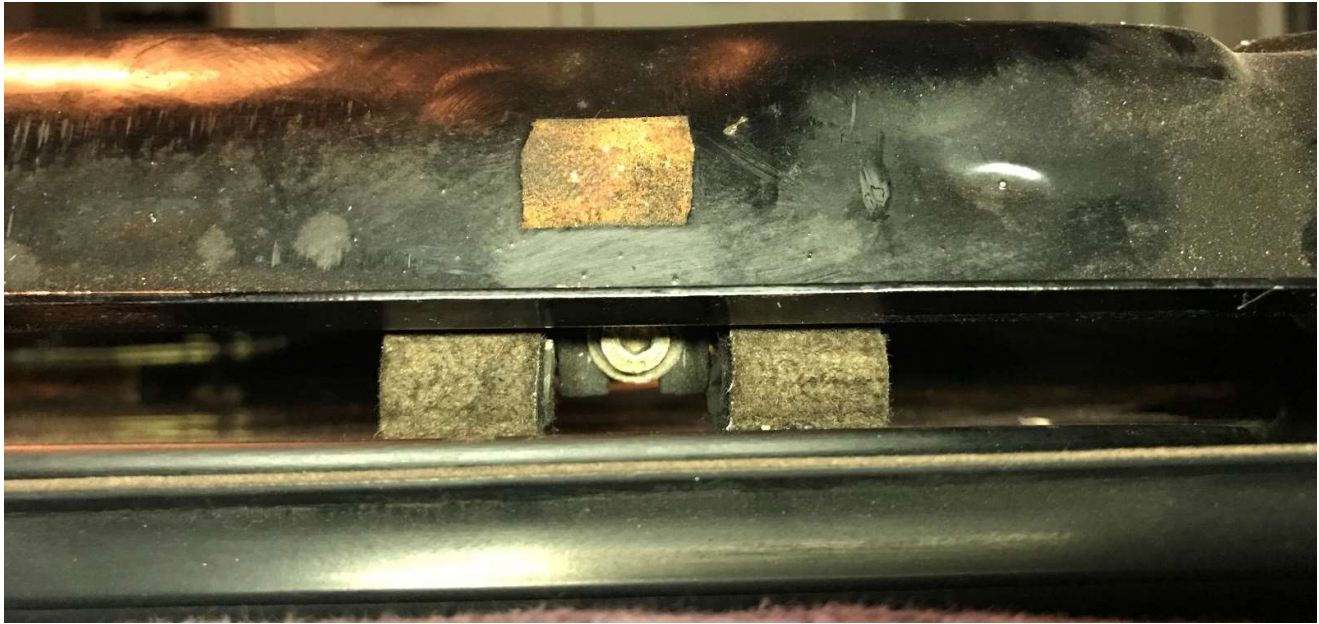
Unscrew the two allen bolts that attach the guide tube to the door frame. Then pull the guide tube free from the pin on the inside-bottom of the door:



You should now have enough room to take the window motor and lift mechanism out through the opening:

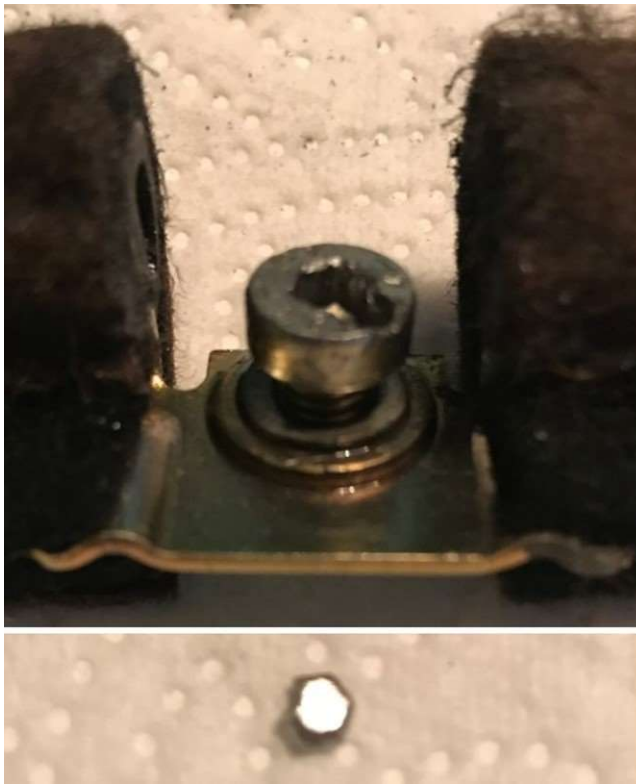


Removing the felt guides is a tricky job and requires a bit of patience. My big tip: NEVER use an allen-head screwdriver with a round tip to loosen the bolt! Mine snapped leaving the tip inside the bolt.....



It took 3 days of drilling and numerous drills to finally drill a small hole in the bolt, enabling me to get a small metal hook behind the tip and force it out. Luckily the inside of the bolt was still in good enough shape to then use a regular allen-head screwdriver and remove the bolt.

When the bolts are out the felt guides will slide down on the inside of the door, allowing you to take the glass out.



8. Glass:

Here's the relevant PET page for reference:

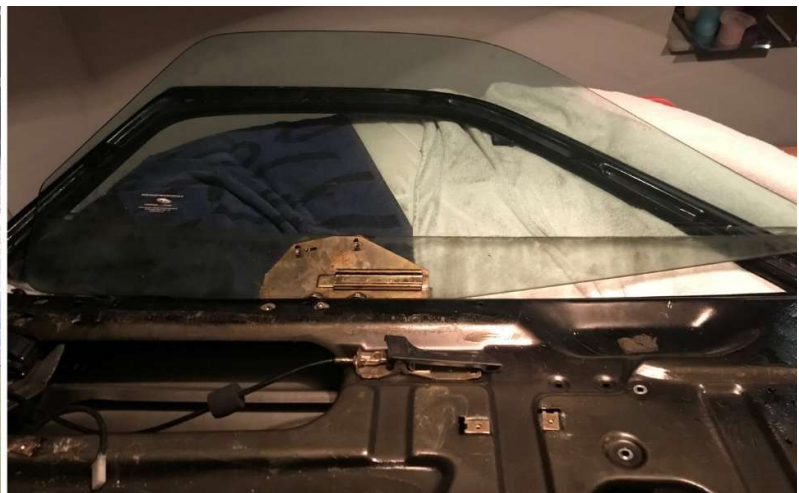
Model	Year	MG	SG	Illustration	Restrictions	U/D	19:35	23.01.2010	PORSCHE	PET	PORSCHE
928	1991	8	05	805-00		2.8					

Pos	Part Number	Description	Remark	Qty	Model
(4)	928 543 106 08	side window tinted green	/R	1	
(4)	928 543 106 09	side window tinted green	/R	1	M471
5	928 543 037 04	sealing frame	/L	1	
(5)	928 543 038 04	sealing frame without rear spoiler	/R	1	
(5)	928 543 045 04	sealing frame	/L	-88	1
(5)	928 543 046 04	sealing frame with rear spoiler	/R	-88	1
(5A)	000 043 204 82	adhesive		1	
6	928 545 018 03	rear window tinted green		1	M471
6	928 545 018 02	rear window tinted green		1	
(6)	928 545 018 04	rear window tinted green	89-	1	M602
-	477 898 011 A	sealing set rear window		1	
7	928 537 101 02	door window glass tinted green	/L	1	
(7)	928 537 102 02	door window glass tinted green	/R	1	
8	928 537 281 04	fastening plug		4	
9	928 537 277 02	threaded piece		4	
10	477 845 043	adhesive plate		1	
11	928 555 509 02	piping windscreen		1	
	01C	black			

The WSM shows at what angle the glass should be lifted out of the door:



When I tried to do that I just couldn't get the glass through the opening, it simply wasn't wide enough. The picture below shows the bracket attached to the window: the guide rail and mounts for the lower slide are slightly too high. I used three plastic tools and pushed the middle one in between the others, creating enough space to get the window out.



After a good clean-up I wrapped it in bubble-plastic and stored it away in a very safe place...!!!!



9. Door lock mechanism, door handle & door support:

Below the relevant Pet pages for reference:

Model	Year	MG	SG	Illustration	Restrictions	UPD	19:34	23.01.2010	PORSCHE	PET	PORSCHE
928	1991	8	04	804-05		248					

Pos	Part Number	Description	Remark	Qty	Model
		installation parts for door			
		differing parts for cars with alarm system see group 8/04/20			
1	928 537 581 03	rotary knob		2	
2	911 531 703 00	cap		2	
3	928 537 585 02	bearing shell		2	
4	999 218 010 02	oval-head screw M 5 X 12		2	
5	N 011 665 3	washer B 5,3		2	
6	928 537 096 02	bearing		2	
7	993 531 563 00	linkage clip		2	
8	N 013 968 7	tapping screw B 4,8 X 13		4	
9	928 537 033 04	door support		2	
10	N 011 524 7	washer A 6,4		4	
11	928 537 451 02	pan-head screw		4	
12	928 537 371 02	desk pad		2	
13	928 537 419 03	pan-head screw		2	
14	928 537 417 02	bearing bracket	/L	1	
(14)	928 537 418 02	bearing bracket	/R	1	
15	928 537 425 02	desk pad	/L	1	
(15)	928 537 426 02	desk pad	/R	1	
16	928 537 459 02	oval-head screw M 6 X 25		4	
17	928 537 907 03	lock inner part	/L	-88	1
(17)	927 537 908 03	lock inner part	/R	-88	1

Model	Year	MG	SG	Illustration	Restrictions	UPD	19:34	23.01.2010	PORSCHE	PET	PORSCHE
928	1991	8	04	804-05		248					

Pos	Part Number	Description	Remark	Qty	Model	Pos	Part Number	Description	Remark	Qty	Model
(17)	928 537 053 09	door lock inner part	/LL/L 89-	1		28	999 507 348 02	speed nut B 4,8		4	
(17)	928 537 054 10	door lock inner part	/LL/R 89-	1		28	999 507 348 01	speed nut B 4,8		4	
(17)	927 537 053 10	door lock inner part	/RL/L 89-	1		29	900 143 118 02	tapping screw B 4,8		4	
(17)	927 537 054 09	door lock inner part	/RL/R 89-	1		30	900 151 028 02	washer B 4,3		4	
18	928 537 721 02	oval-head screw outer part		4		31	N 010 239 11	hexagon-head bolt M 8 X 18		2	
(19)	928 537 153 03	door lock outer part	/L	1		(32)	928 537 545 02	finger plate	/L	1	
19	928 537 154 03	door lock outer part	/R	1		32	928 537 546 02	finger plate	/R	1	
20	928 537 133 02	door lock striker	-89	2		33	900 269 006 07	countersunk-head screw M 4 X 8		2	
20	928 537 133 04	door lock striker	90-	1		34	928 537 049 02	bearing plate	/L	1	
21	928 537 131 03	lock pin	-89	2		(34)	928 537 050 02	bearing plate	/R	1	
21	928 537 131 03	lock pin	90-	1		35	999 591 242 01	speed nut D = 4,0		2	
22	928 537 135 04	desk pad	-90	2		36	928 537 169 00	interior handle	/L	1	
(22)	928 537 135 04	desk pad	91	2			70B	satin black			
23	900 249 024 00	countersunk-head screw M 8 X 25		4		(36)	928 537 170 00	interior handle	/R	1	
24	928 537 160 04	locking rod		2			70B	satin black			
(24)	928 537 160 05	locking rod	89-	2		37	928 537 557 02	bolt		2	
25	928 555 359 02	locking knob	-88	2		38	900 116 002 01	lock washer		2	
(25)	928 637 138 00	locking knob	89-	2		39	928 537 157 02	nut lock		2	
	01C	satin black				40	900 269 015 02	countersunk-head screw M 5 X 10		6	
26	928 537 333 03	covering for lock	/L -88	1		41	928 537 055 02	bowden cable		2	
(26)	928 537 333 04	covering for lock	/L 89-	1		42	911 613 636 00	damping piece		2	
(26)	928 537 334 03	covering for lock	/R -88	1		43	928 537 661 02	grab plate		2	
(26)	928 537 334 04	covering for lock	/R 89-	1		44	928 537 063 04	bearing	/L	1	
-	999 911 037 50	tread	*			(44)	928 537 064 04	bearing	/R	1	
27	-	70 MM		2							

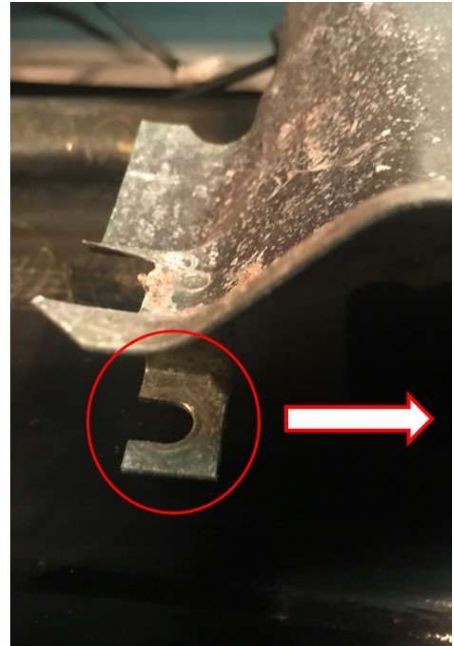
Model	Year	MG	SG	Illustration	Restrictions	UPD	19:34	23.01.2010	PORSCHE	PET	PORSCHE
928	1991	8	04	804-05		248					

Pos	Part Number	Description	Remark	Qty	Model	Pos	Part Number	Description	Remark	Qty	Model
45	900 076 010 02	hexagon nut M 6		4		62	928 637 137 00	pulse sender	89-	2	
46	N 012 006 4	lock ring B 6		4		63	900 119 035 02	pan-head screw M 6X8		2	
47	N 014 761 2	pan-head screw M 6 X 12		4		64	N 011 524 7	washer		2	
		M 6 X 12				65	999 703 224 40	cap		2	
48	N 012 226 5	spring washer A 6		4		66	928 537 630 02	bulb		1	
49	928 537 140 03	connecting rod		1							
50	928 537 111 04	operating rod		2							
51	928 537 531 03	desk pad		2							
52	928 537 633 05	door lock cylinder with stipulated lock number without key state lock number Pos 53 use also:		2							
52	928 537 903 02	door lock cylinder with 1 key w/o stipulated lock number Pos 53 use also:		2							
53	928 537 713 02	contact switch	/L	1							
53	928 537 714 02	contact switch	/R	1							
54	928 537 493 02	compression spring		2							
55	928 537 495 03	gasket		2							
56	928 538 033 02	key state lock number with stipulated lock number information available		3							
57	944 538 431 00	key cap		2							
58	944 538 041 00	key lamp		2							
59	944 538 443 00	crest		2							
60	000 043 204 21	grease for lock cylinder		X							
61	928 537 747 00	luminous point		2							

First job is to remove the lock security plate. To do so, remove the two screws indicated in the pictures below:



The security plate is held at the bottom by the bolt that attaches the reinforcement bar to the door frame. Loosen the bolt but DO NOT take it out: there is quite some tension on that bar, and it will be very difficult to get the bolt back in afterwards. When the bolt is loose, just slide the security plate out.



There is some rust on my plate, indicating there was some moisture in the door. Having no vapor barriers probably didn't help....

