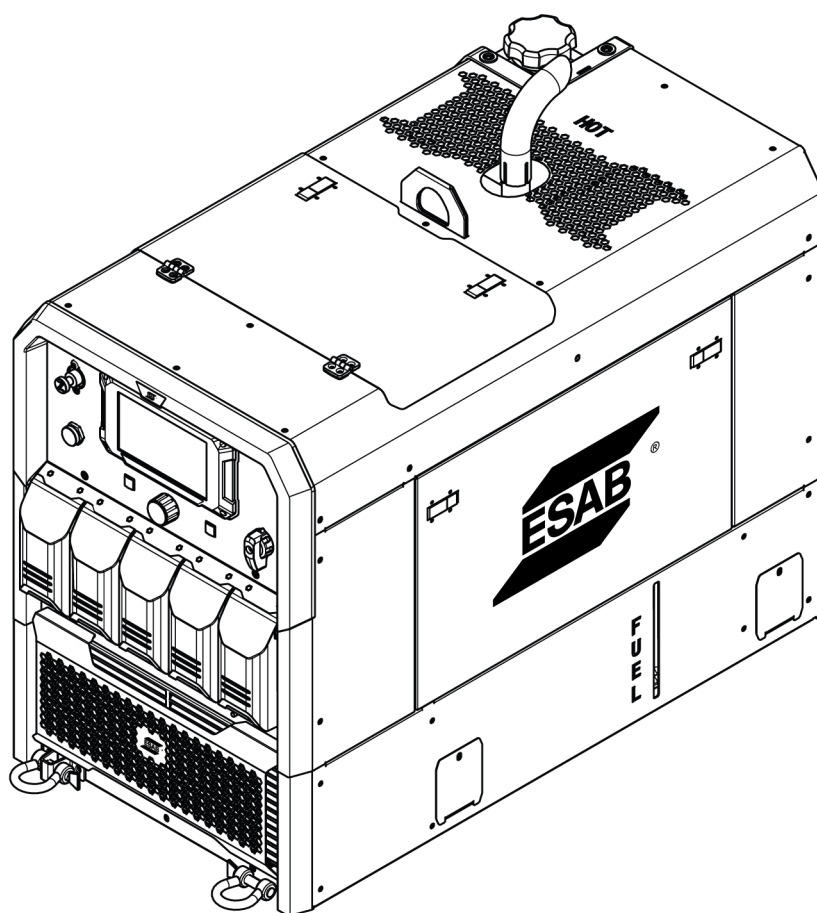


Ruffian EDW 270



Spare parts list

Ordering no.	Denomination	Notes
0707 070 270	Ruffian 270 Engine Driven Welder	Welding power source
0448 578*	Ruffian 270 Engine Driven Welder	Instruction manual

Spare parts may be ordered through your nearest ESAB dealer, see esab.com. When ordering, please state product type, serial number, denominations and ordering numbers according to the spare parts list. This facilitates dispatch and ensures correct delivery.

Maintenance and repair work should be performed by an experienced person, and electrical work only by a trained electrician. Use only recommended spare parts.

For accessories to the product, see the instruction manual.

The three last digits in the document number of the manual show the version of the manual. Therefore they are replaced with * here. Make sure to use a manual with a serial number or software version that corresponds with the product, see the front page of the manual.

1	SPARE PARTS	4
1.1	General assembly	4
1.2	Inverter assembly	8
1.3	Front panel assembly	10
1.4	Left door assembly	14
1.5	Middle plate assembly	15
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1 SPARE PARTS

1.1 General assembly

C = Component designation in the circuit diagram

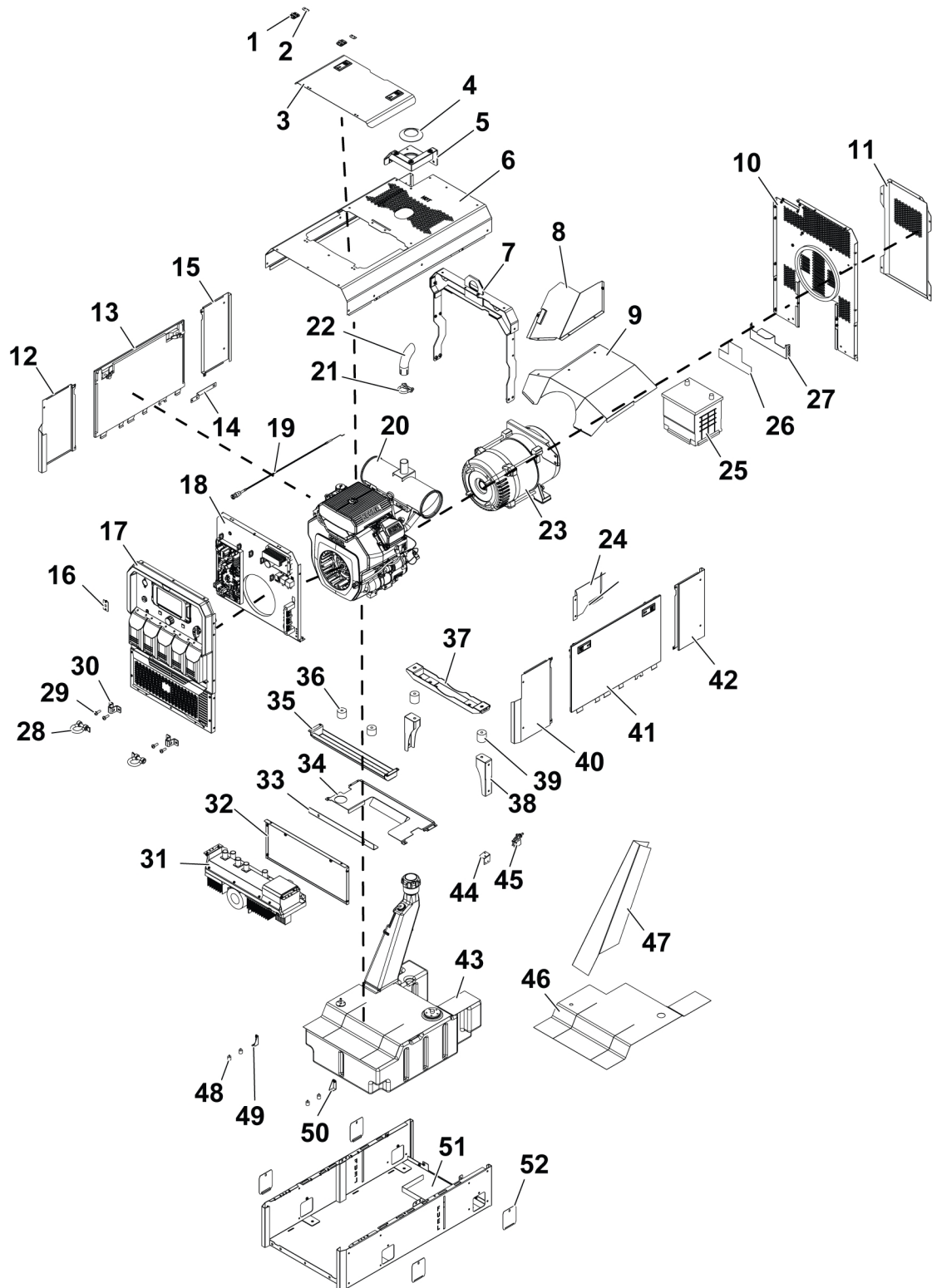
Item	Qty	Ordering no.	Denomination	Notes	C
1	2		Hinge	Refer to item no. 101	
2	2		Pad for hinge	Refer to item no. 101	
3	1	0558 103 372	Top metal plate w/ label and latch	Refer to item no. 701 in <i>"Upper door assembly"</i> , page 18 Order together with item no. 7 and 53 (2ea.) if serial number is before DN 611 XX XX XXXX	
4	1	0558 103 409	Seal rubber for fuel inlet		
5	1	0558 103 410	Plastic cover for fuel inlet		
6	1	0558 103 374	Top metal plate 2 w/ label	Including labels	
7	1	0558 103 413	Lift bracket	Order together with item no. 3 and 53 (2ea.) if serial number is before DN 611 XX XX XXXX	
8	1		Heat insulation board		
9	1	0558 103 414	Heat conductive plate		
10	1	0558 103 377	Back metal plate w/ labels	Including labels	
11	1	0558 103 416	Back metal plate 2		
12	1	0558 103 520	Left metal plate 2		
13	1	0558 103 370	Left plate assembly ruffian logo	Including Ruffian logo, refer to item no. 401 in <i>"Left door assembly"</i> , page 14	
14	1	0558 103 544	Metal mid holder		
15	1	0558 103 373	Left plate 1 w/ label		
16	1		Choke bracket	Refer to item no. 102	
17	1		Front panel assembly	Refer to <i>"Front panel assembly"</i> , page 10	
18	1		Middle mounted plate assembly	Refer to <i>"Middle plate assembly"</i> , page 15	
19	1		Choke cable	Refer to item no. 102	
20	1		Engine assembly	Refer to <i>"Engine assembly"</i> , page 23	
21	1	0558 103 411	Clamp		
22	1	0558 103 412	Exhaust pipe		
23	1	0558 103 522	Complete generator	Refer to <i>"Generator assembly"</i> , page 21	
24	1	0558 103 425	Heat conductive plate 2		

1 SPARE PARTS

Item	Qty	Ordering no.	Denomination	Notes	C
25	1		Battery 400cca 12v		
26	1	0558 103 545	Battery fixture plate foam		
27	1	0558 103 415	Battery fixture plate		
28	2		Cable strain relief	Refer to item no. 103	
29	4		Torx screw M8×25	Refer to item no. 103	
30	2		Strain relief bracket	Refer to item no. 103	
31	1		PCBA assembly	Refer to <i>"Inverter assembly"</i> , page 8	
32	1	0558 103 417	Middle plate		
33	1	0558 103 419	Fuel tank fix plate 1		
34	1	0558 103 420	Fuel tank fix plate 2		
35	1	0558 103 418	Engine fix plate		
36	2	0558 103 421	Front engine vibration damping		
37	1	0558 103 424	Generator fix bracket		
38	2	0558 103 422	Vibration damping bracket		
39	2	0558 103 423	Back engine vibration damping		
40	1	0558 103 523	Right metal plate 1		
41	1	0558 103 524	Right plate assembly (ESAB logo)	Including ESAB logo, refer to item no. 601 in <i>"Right door assembly"</i> , page 17	
42	1	0558 103 426	Right metal plate 3		
43	1		Fuel tank assembly	Refer to <i>"Fuel tank assembly"</i> , page 19	
44	1		EVAP valve plate		
45	1	0558 103 430	EVAP solenoid valve		
46	1		Fuel tank insulation blanket		
47	1		Fuel tank neck insulation blanket		
48	4	0558 103 428	PCBA vibration damping		
49	1		Bracket for middle plate 2		
50	1		Bracket for middle plate 1		
51	1		Bottom plate chassis		
52	4	0558 103 546	Bottom plate window		
	1	0558 103 448	Battery cables and terminals	Not shown in illustration	
	1	0558 103 525	Wood crate with logos	Not shown in illustration	
Item	Qty	Ordering no.	Denomination	Notes	C
101	2	0558 103 371	Hinge assembly	Includes item no. 1 and 2	
102	1	0558 103 376	Choke assembly	Includes item no. 16 and 19	

1 SPARE PARTS

Item	Qty	Ordering no.	Denomination	Notes	C
103	2	0558 103 378	Strain relief assembly	Includes item no. 28, 29, and 30	
104	1	0558 103 379	Warning labels kit	Kit of 7 labels - Includes: Danger, QR code, hot exhaust, hot surfaces, fuel, battery, rating labels Not shown in illustration	
105	1	0558 103 380	Front labels kit	Kit of 5 labels - Includes: ESAB, EMP 270G EDW, user interface, rubber covers, auxiliary sockets labels Not shown in illustration	

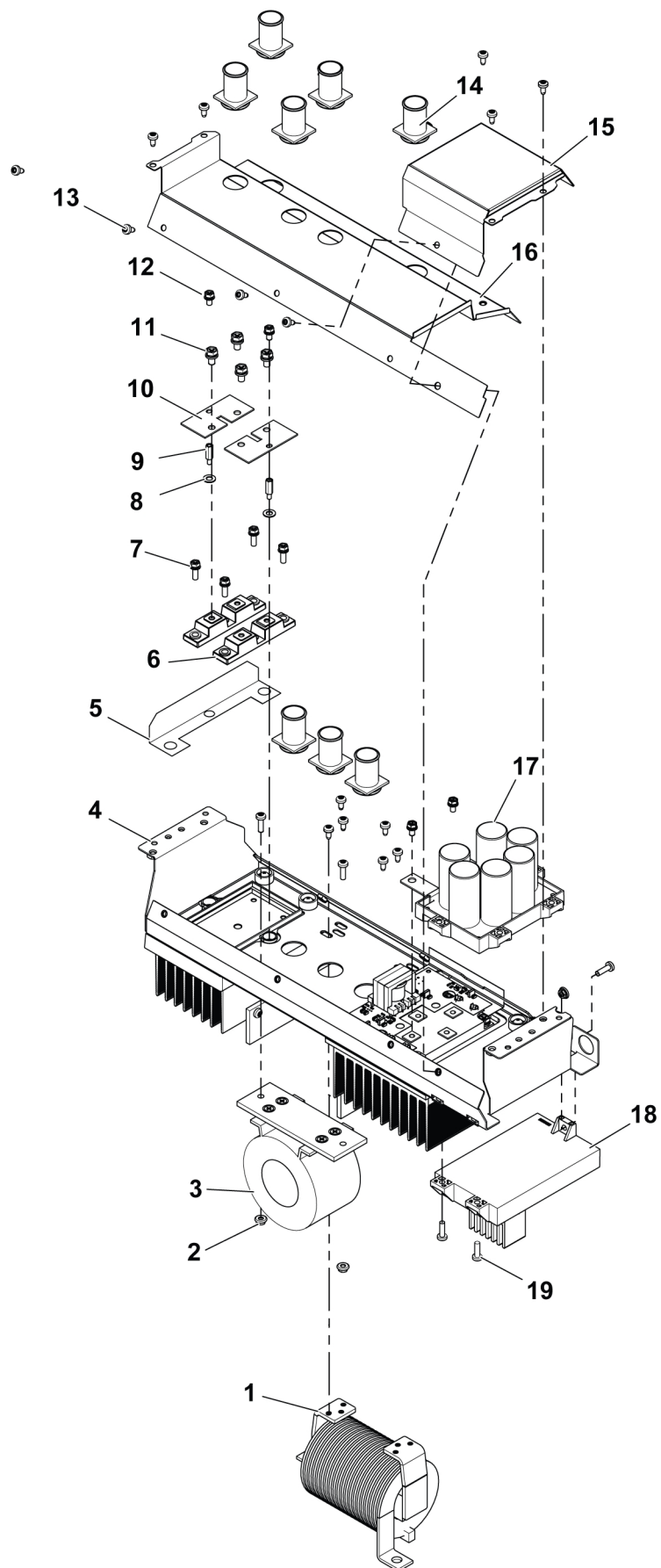


1.2 Inverter assembly

C = Component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	1	0558 103 396	Output inductor		
2	3		M5 flange nut		
3	1	0558 103 397	Main transformer		
4	1	0558 103 398	Drive PCB + IGBT PCB module		
5	1		Insulate paper inverter		
6	2		Fast recovery diode	Refer to item no. 201	
7	4		M5×10 hex screw	Refer to item no. 201	
8	2		Ø6 copper washer	Refer to item no. 201	
9	2		M5×15 copper stud	Refer to item no.201	
10	2		Plastic insulator	Refer to item no. 201	
11	4		M5x10 hex screw	Refer to item no. 201	
12	4		M6×12 bolt	Refer to item no. 201	
13	11		M5×10 hex screw		
14	8		Cable protective rubber cover 1		
15	1	0558 103 399	Capacitor plate		
16	1	0558 103 400	PCBA plate		
17	1	0558 103 401	Capacitor with plate		
18	1	0558 103 402	Rectifier with plate		
19	5		M5×16 hex screw		

Item	Qty	Ordering no.	Denomination	Notes	C
201	1	0558 103 369	Fast recovery diode assembly	Includes item no. 6 (2ea.), 7 (4ea.), 8 (2ea.), 9 (2ea.), 10 (2ea.), 11 (2ea.), and 12 (4ea.)	



1.3 Front panel assembly

C = Component designation in the circuit diagram

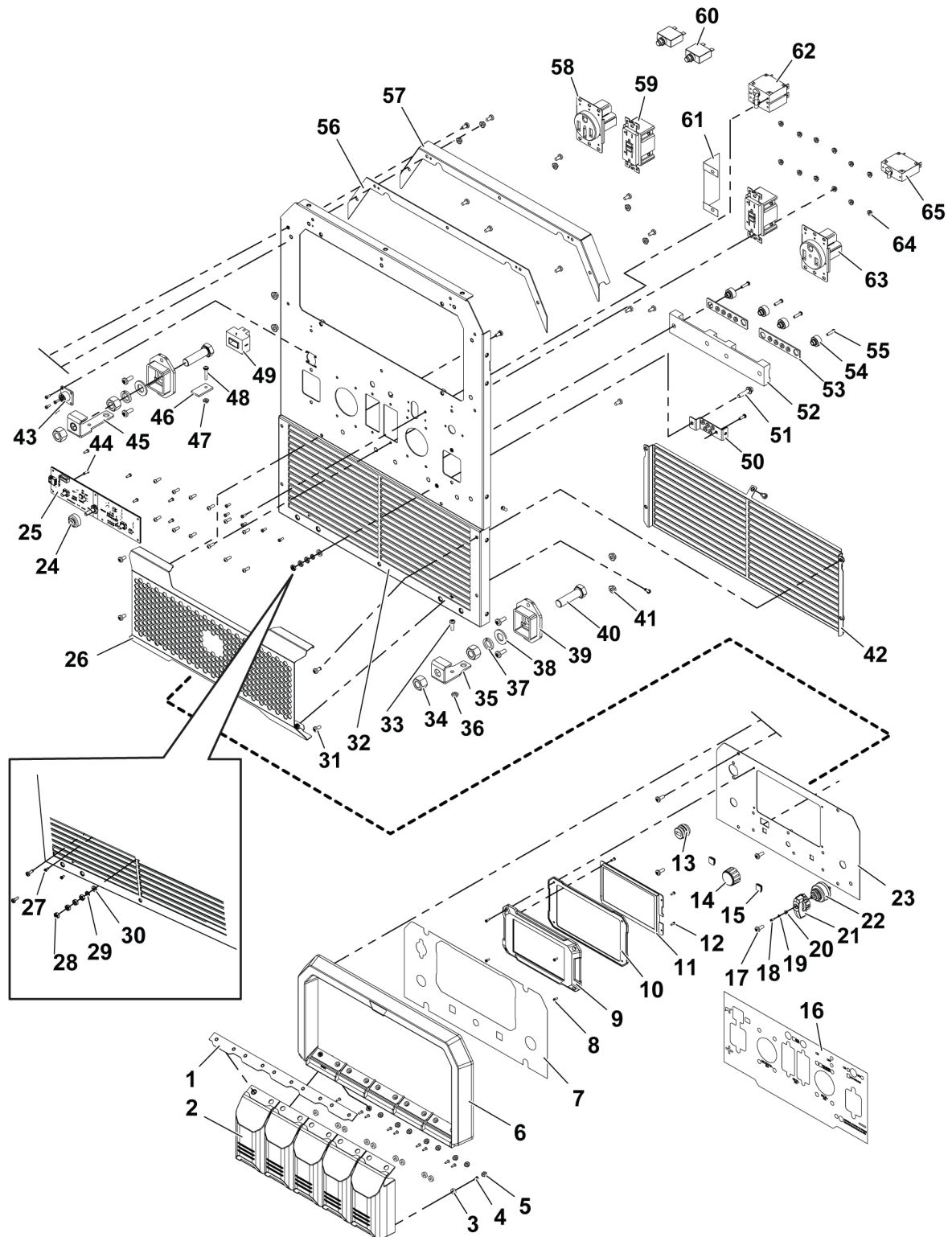
Item	Qty	Ordering no.	Denomination	Notes	C
1	1	0558 103 361	Rubber cover plate w/ label	Includes label	
2	5		Rubber cover	Refer to item no. 301	
3	10		Magnet	Refer to item no. 301	
4	10		M3×10 screw	Refer to item no. 301	
5	15		M5 flange nut		
6	1	0558 103 363	Front plastic cover w/ label	Includes ESAB label	
7	1	0558 103 381	User interface label		
8	8		M3×12 hex screw		
9	1		Screen cover w/ label	Refer to item no. 302	
10	1		Outside sealing ring	Refer to item no. 302	
11	1	0558 103 515	Screen with glass	Refer to item no. 302	
12	4		Self-tapping screw	ST 3.5×9.5 Refer to item no. 302	
13	1	0558 103 383	USB connector		
14	1	0558 103 384	Menu encoder knob		
15	2	0558 103 382	Front panel rubber button		
16	1	0558 103 516	Auxiliary sockets label		
17	6		M6×16 hex screw		
18	1		Screw for the start switch	Refer to item no. 303	
19	1		Spring washer Φ4	Refer to item no. 303	
20	1		Flat washer Φ4	Refer to item no. 303	
21	1		Start switch knob	Refer to item no. 303	
22	1	0707 070 273	Start switch		
23	1	0558 103 385	Front control panel		
24	1		Cover for encoder		
25	1	0558 103 518	Front panel PCBA		
26	1	0558 103 365	Front honeycomb w/ logo	Includes ESAB logo	
27	6		M3×6 hex screw		
28	3		M5 flange nut		
29	1		M6 spring washer		
30	1		M6 flat washer		
31	19		M5×10 torx screw		
32	1	0558 103 386	Front metal panel	Order together with item no.304 and no.305 if serial number is before DN 611 XX XX XXXX	
33	2		M5×12 screw	Refer to item no. 304 or 305	

1 SPARE PARTS

Item	Qty	Ordering no.	Denomination	Notes	C
34	4		M14 nut	Refer to item no. 304 or 305	
35	1		Copper bar right	Refer to item no. 304	
36	2		M5 flange nut	Refer to item no. 304 or 305	
37	2		1/2 spring washer	Refer to item no. 304 or 305	
38	2		M14 flat washier	Refer to item no. 304 or 305	
39	2		Plastic holder	Refer to item no. 304 or 305	
40	2		M14×50 bolt	Refer to item no. 304 or 305	
41	4		M6 nut	Refer to item no. 304 or 305	
42	1	0558 103 387	Metal louver		
43	1	0558 103 367	Complete 8 pin connector		
44	6		M3×8 screw		
45	1		Left welding terminal	Refer to item no. 305	
46	1		Insulate plate for hall		
47	1		M4 nut		
48	1		M4×25 screw		
49	1	0558 103 540	Hall sensor		
50	1	0558 103 388	Copper bar 1		
51	1		M6×25 bolt		
52	1		Insulate pillar		
53	2	0558 103 391	Copper bar 2		
54	4		Insulate pillar round		
55	4		M4×20 screw		
56	1		Water proof foam		
57	1		Water proof plate		
58	1	0558 103 390	50 A hybrid socket 120/240 V		
59	2	0558 103 393	20 A socket 120 V		
60	2	0558 103 392	Over current protector		
61	1		Insulate paper front		
62	1	0558 103 395	2P breaker 50 A		
63	1	0558 103 394	50 A socket 240 V		
64	12		M4 nut		
65	1	0558 103 389	1P breaker		
Item	Qty	Ordering no.	Denomination	Notes	C
301	1	0558 103 362	Rubber cover kit	Includes item no. 2, 3 (2ea.) and 4 (2ea.)	
302	1	0558 103 364	Display and cover assembly	Includes EMP 270G label Includes item no. 9, 10, 11 and 12	

1 SPARE PARTS

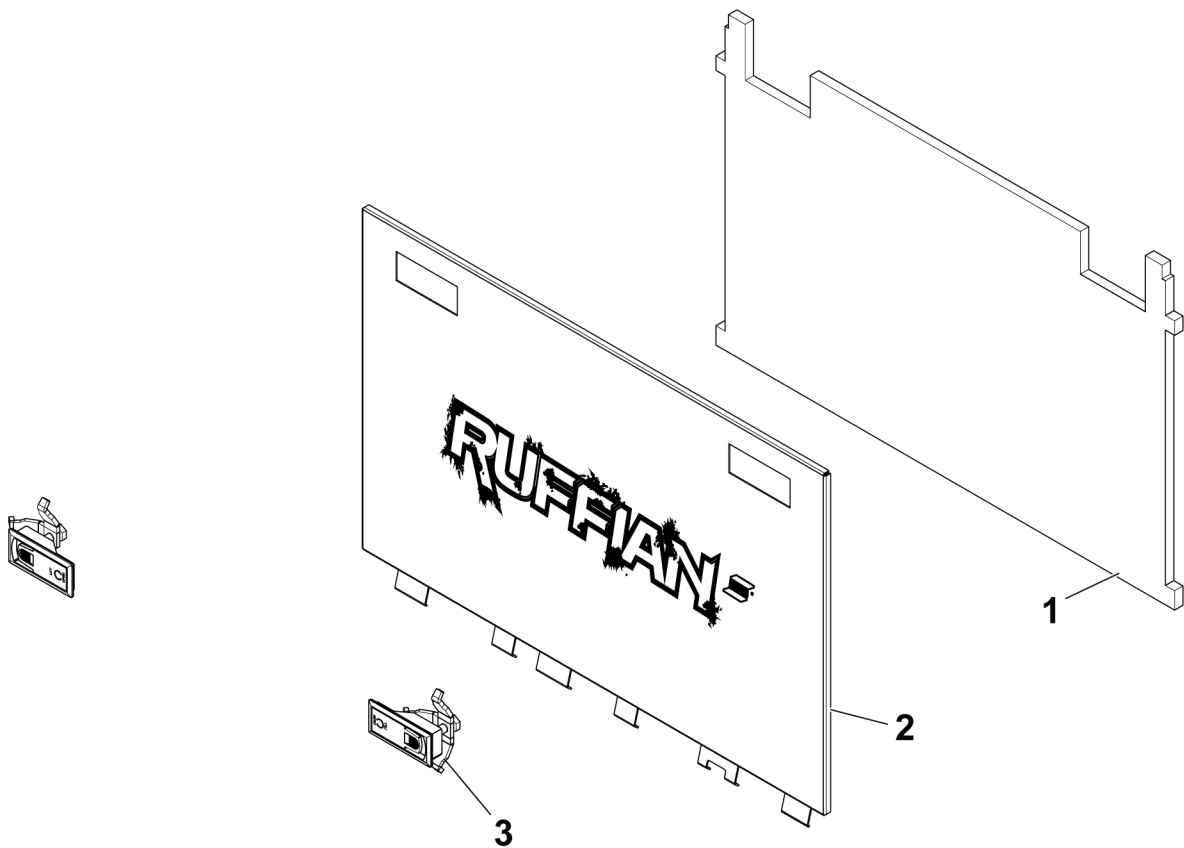
Item	Qty	Ordering no.	Denomination	Notes	C
303	1	0558 103 517	Start switch knob assy	Includes item no. 18, 19, 20 and 21	
304	1	0558 103 538	Right welding terminal assembly	Includes item no. 17 (2ea.), 33, 34 (2ea.), 35, 36, 37, 38, 39, 40 and 41 (2ea.) Order together with item no 32 and 305 if serial number is before DN 611 XX XX XXXX	
305	1	0558 103 539	Left welding terminal assembly	Includes item no. 17 (2ea.), 33, 34 (2ea.), 36, 37, 38, 39, 40, 41 and 45 (2ea.) Order together with item no 32 and 304 if serial number is before DN 611 XX XX XXXX	



1.4 Left door assembly

C = Component designation in the circuit diagram

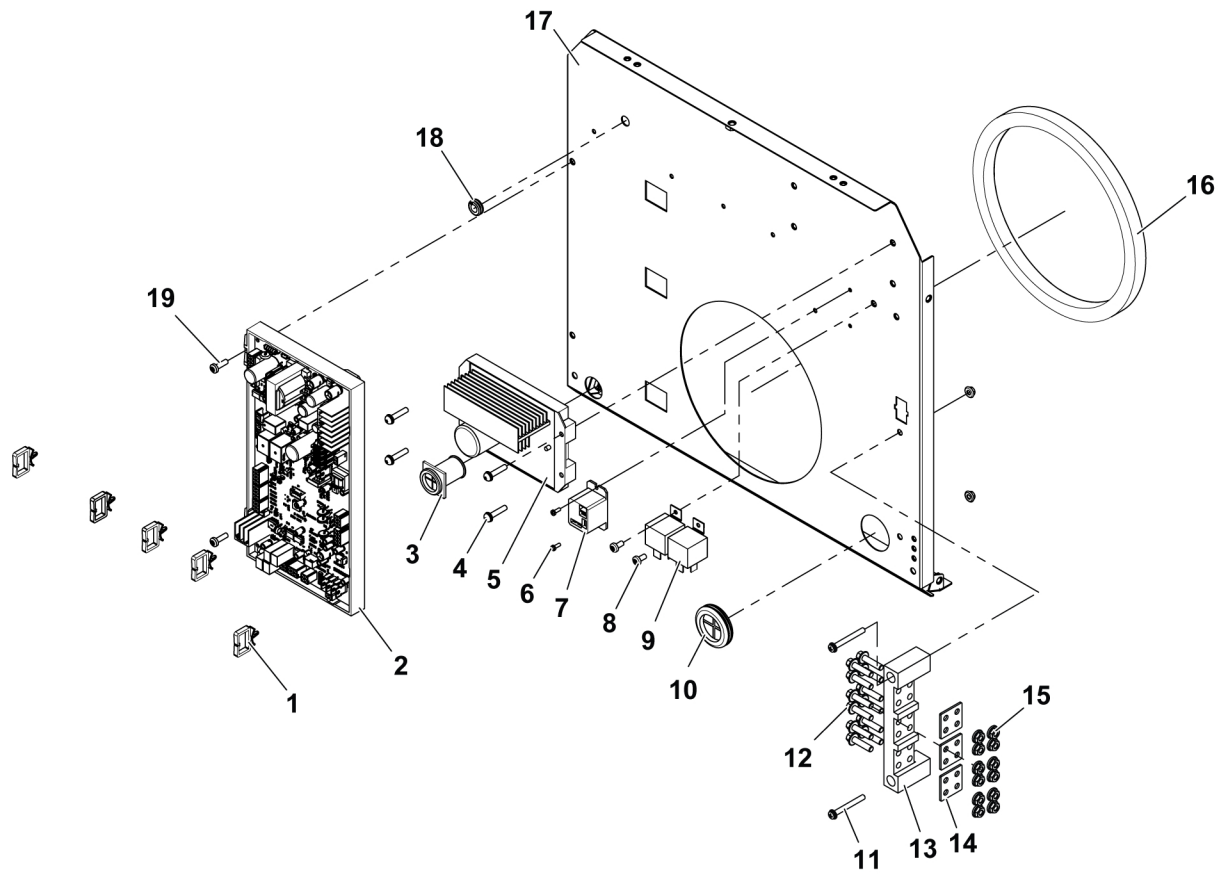
Item	Qty	Ordering no.	Denomination	Notes	C
1	1	0558 103 403	Side sound proof foam	Refer to item no. 401	
2	1		Left door ruffian logo	With Ruffian logo, refer to item no. 401	
3	2	0558 103 519	Side door latch	Refer to item no. 401	
Item	Qty	Ordering no.	Denomination	Notes	C
401	1	0558 103 370	Left plate assembly ruffian logo	Includes item no. 1, 2 and 3 (2ea.) with ruffian logo	



1.5 Middle plate assembly

C = Component designation in the circuit diagram

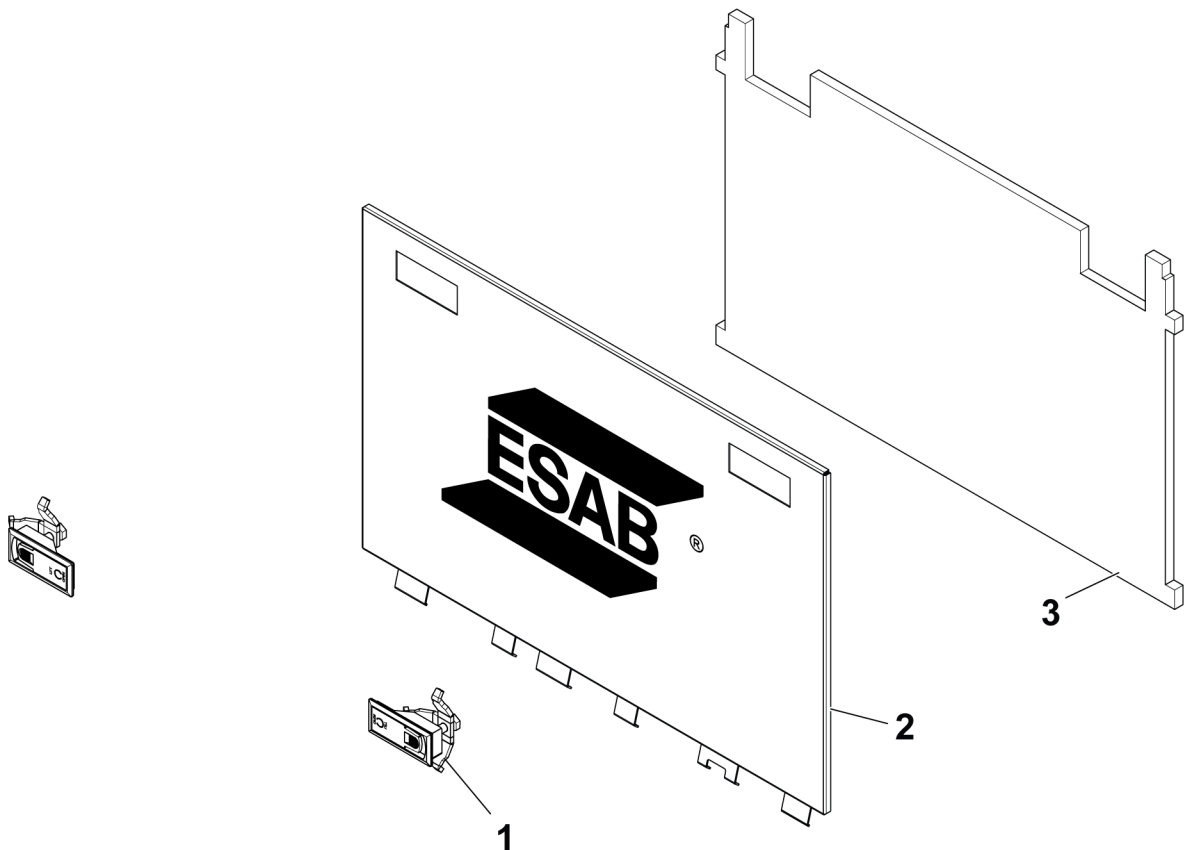
Item	Qty	Ordering no.	Denomination	Notes	C
1	5		Wire buckle		
2	1	0558 103 406	Control PCBA + bracket		
3	1		Cable protective rubber cover 1		
4	4		M5×25 screw		
5	1	0558 103 404	AVR PCB		
6	2		M3×8 screws		
7	1	0558 103 541	Relay 1		
8	2		M5×10 torx screw		
9	2	0558 103 405	Relay 2		
10	1		Cable protective rubber cover 2		
11	2		M5×45 combination screws		
12	12		M5×30 bolts		
13	1		Copper busbar		
14	3		Insulation plate		
15	14		M5 flange nuts		
16	1	0558 103 408	Middle sound proof foam		
17	1	0558 103 407	Middle mounted plate		
18	1		Cable protective rubber		
19	2		M5×16 torx screw		



1.6 Right door assembly

C = Component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	2	0558 103 519	Side door latch	Refer to item no. 601	
2	1		Right door ESAB logo	With ESAB logo, refer to item no. 601	
3	1	0558 103 403	Side sound proof foam	Refer to item no. 601	
Item	Qty	Ordering no.	Denomination	Notes	C
601	1	0558 103 524	Right plate assembly ESAB logo	Includes item no. 1(2ea.), 2, and 3 with ESAB logo	

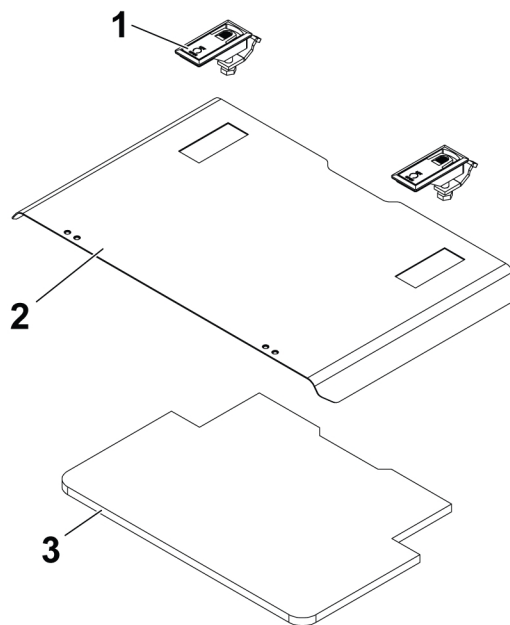


1.7 Upper door assembly

C = Component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	2	0558 103 566	Upper door latch	Refer to item no. 701	
2	1		Top metal plate 1	Refer to item no. 701	
3	1		Top metal foam	Refer to item no. 701	

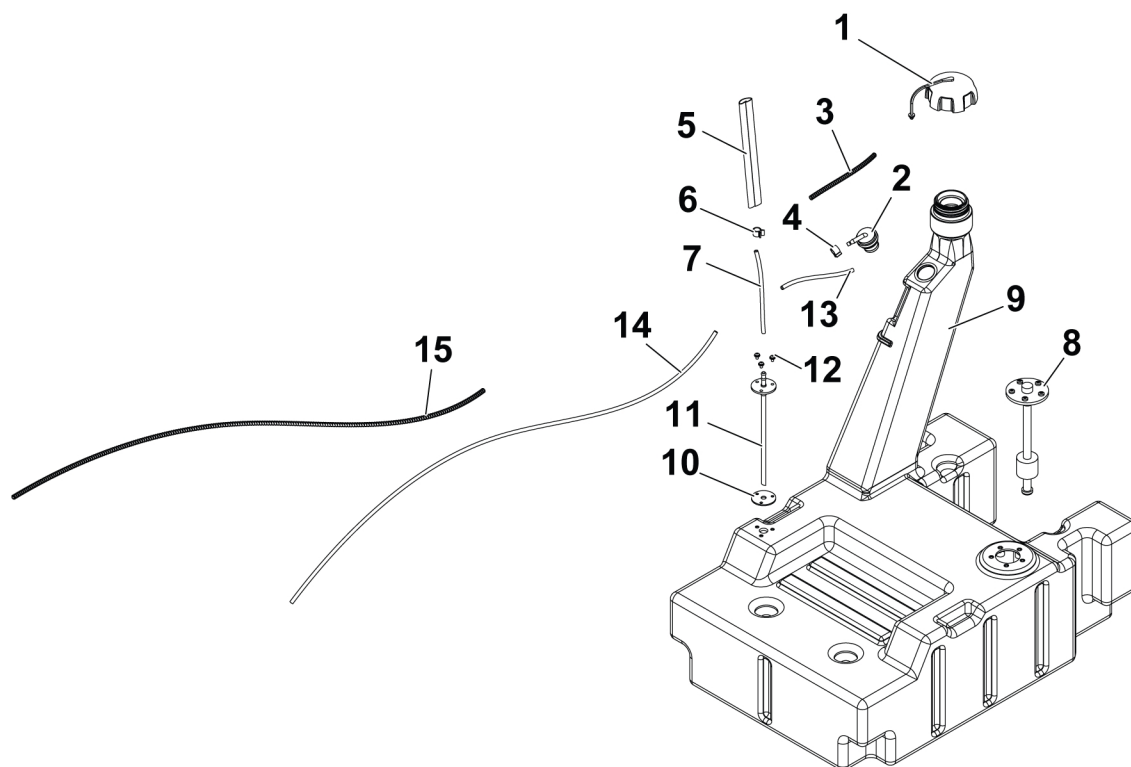
Item	Qty	Ordering no.	Denomination	Notes	C
701	1	0558 103 372	Top metal plate w/ label and latch	Includes item no. 1(2ea.), 2, and 3	



1.8 Fuel tank assembly

C = Component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	1	0558 103 503	Fuel tank cap outer tether (25°)	Order if serial number is after DN 611 XX XX XXXX	
		0558 103 537	Fuel tank cap inner tether (35°)	Order if serial number is before DN 611 XX XX XXXX	
2	1	0558 103 446	Fuel tank roll over valve		
3	1		Corrugated pipe 230		
4	1		Hose clamp		
5	1		Insulating sleeve		
6	1		Hose clamp		
7	1		Gasoline hose		
8	1	0558 103 445	Fuel level sensor		
9	1	0558 103 427	Fuel tank	Order together with item no.1 (0558 103 503) if serial number is before DN 611 XX XX XXXX	
10	1		Fuel tank rubber gasket		
11	1	0558 103 447	Fuel tank outlet tube		
12	3		M4×8 torx pan head combination screws		
13	1		Gasoline pipe		
14	1		Gasoline pipe		
15	1		Corrugated pipe 770		
	1		EVAP gas hoses	Not shown in illustration	

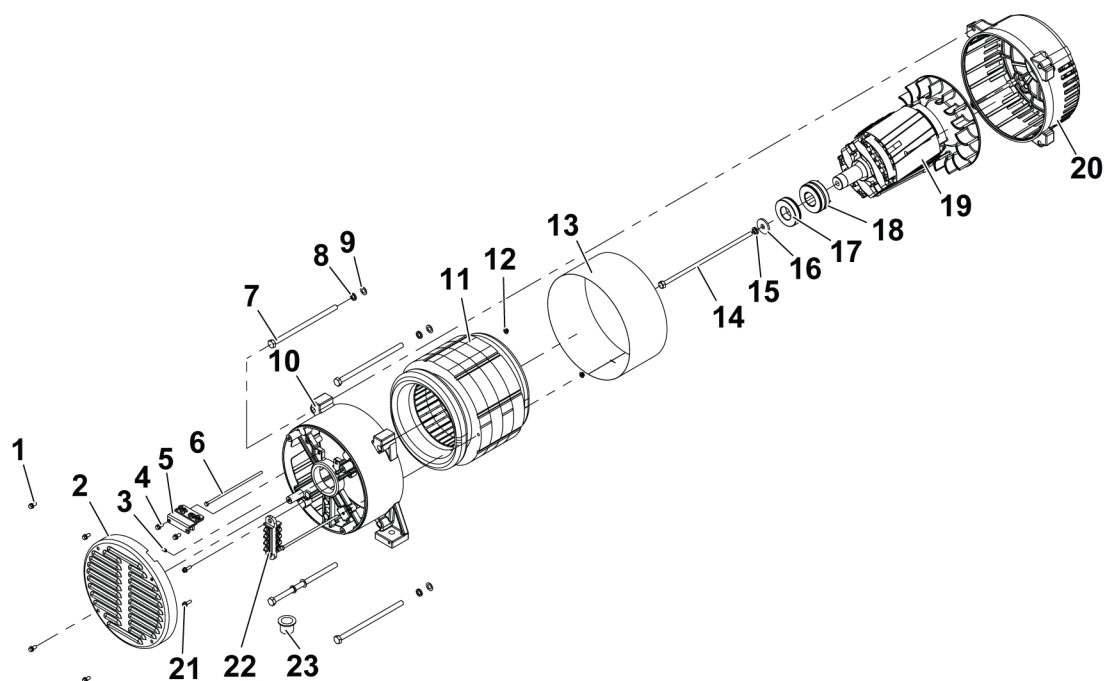


1.9 Generator assembly

C = Component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	4		M6 hex flange bolt	Refer to item no. 901	
2	1		Generator rear cover	Refer to item no. 901	
3	1		Hex socket screw	Refer to item no. 901	
4	2		M6 hex flange bolt	Refer to item no. 901	
5	1	0558 103 431	Generator brushes assembly	Refer to item no. 901	
6	2		M5×0.8/165 hex head bolt	Refer to item no. 901	
7	4		M10×1.5/200 hex flange bolt	Refer to item no. 901	
8	4		Φ10 spring washer	Refer to item no. 901	
9	4		M10 flat washer	Refer to item no. 901	
10	1	0558 103 567	Generator cover	Refer to item no. 901	
11	1		Generator stator	Refer to item no. 901	
12	2		M5×0.8 lock nut	Refer to item no. 901	
13	1		Generator protective cover	Refer to item no. 901	
14	1		5/16"-24/265 hex flange bolt	Refer to item no. 902	
15	1		Φ10 spring washer	Refer to item no. 902	
16	1		M10.5 flat washer	Refer to item no. 902	
17	1	0558 103 521	Generator bearing	Refer to item no. 902	
18	1	0558 103 432	Generator slip rings	Refer to item no. 902	
19	1		Generator rotor	Refer to item no. 902	
20	1	0558 103 568	Generator front cover	Refer to item no. 903	
21	3		M5×0.8/16 bolt	Refer to item no. 901	
22	1		Terminal board assembly	Refer to item no. 901	
23	1		Wire clamp	Refer to item no. 901	

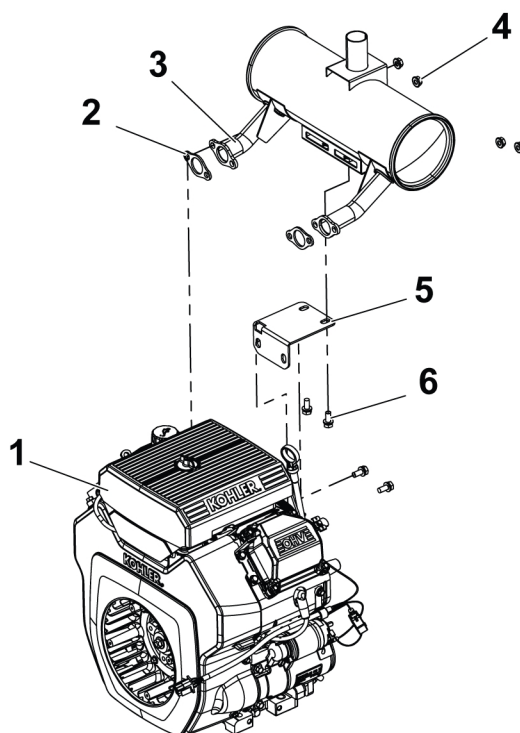
Item	Qty	Ordering no.	Denomination	Notes	C
901	1	0558 103 535	Generator stator assembly	Includes item no. 1 to 13 and 21 to 23	
902	1	0558 103 536	Generator rotor assembly	Includes item no. 14 to 19	
903	1	0558 103 522	Complete generator	Includes item no. 1 to 23	



1.10 Engine assembly

C = Component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	1		CH730-3358 engine	-	
2	2		Muffler gasket		
3	1	0558 103 429	Muffler		
4	4		M8 hex flange nuts		
5	1		Muffler plate		
6	4		M8×20 hex screw		



1.11 Cable harnesses

C = Component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	1	0558 103 433	Engine connection wire	Engine to switch	
2	1	0558 103 434	Connection wire assembly	Generator to AVR 1	
3	1	0558 103 435	Connection wire assembly	Generator to AVR 2	
4	1	0558 103 436	Connection wire assembly	PCB CN10 to SEN./NTC RECT.	
5	1	0558 103 438	Semi-finished wire with electronic components	PCB CN13 to CT2/IN. VOLT	
6	1	0558 103 439	Connection wire assembly	PCB CN2 to out terminals	
7	1	0558 103 440	Connection wire assembly	PCB CN14 to front PCB	
8	1	0558 103 441	Wiring harness without electronic components	PCB CN3 to rectifier PCB	
9	1	0558 103 442	Wiring harness without electronic components	PCB CN8 to inverter PCB	
10	1	0558 103 443	Connection wire assembly	Front PCB to display	



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