

# ***RobustFeed AVS ECHO***



## **Spare parts list**

<b>Ordering no.</b>	<b>Denomination</b>	<b>Note</b>
0448 700 880	RobustFeed AVS ECHO CE	with EURO connector
0448 700 881	RobustFeed AVS ECHO CSA	with Tweco connector
0448 466 *	Service manual	RobustFeed AVS ECHO
0448 227 *	Instruction manual	RobustFeed AVS ECHO, CE
0448 228 *	Instruction manual	RobustFeed AVS ECHO, CSA

Spare parts may be ordered through your nearest ESAB dealer, see [esab.com](http://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.

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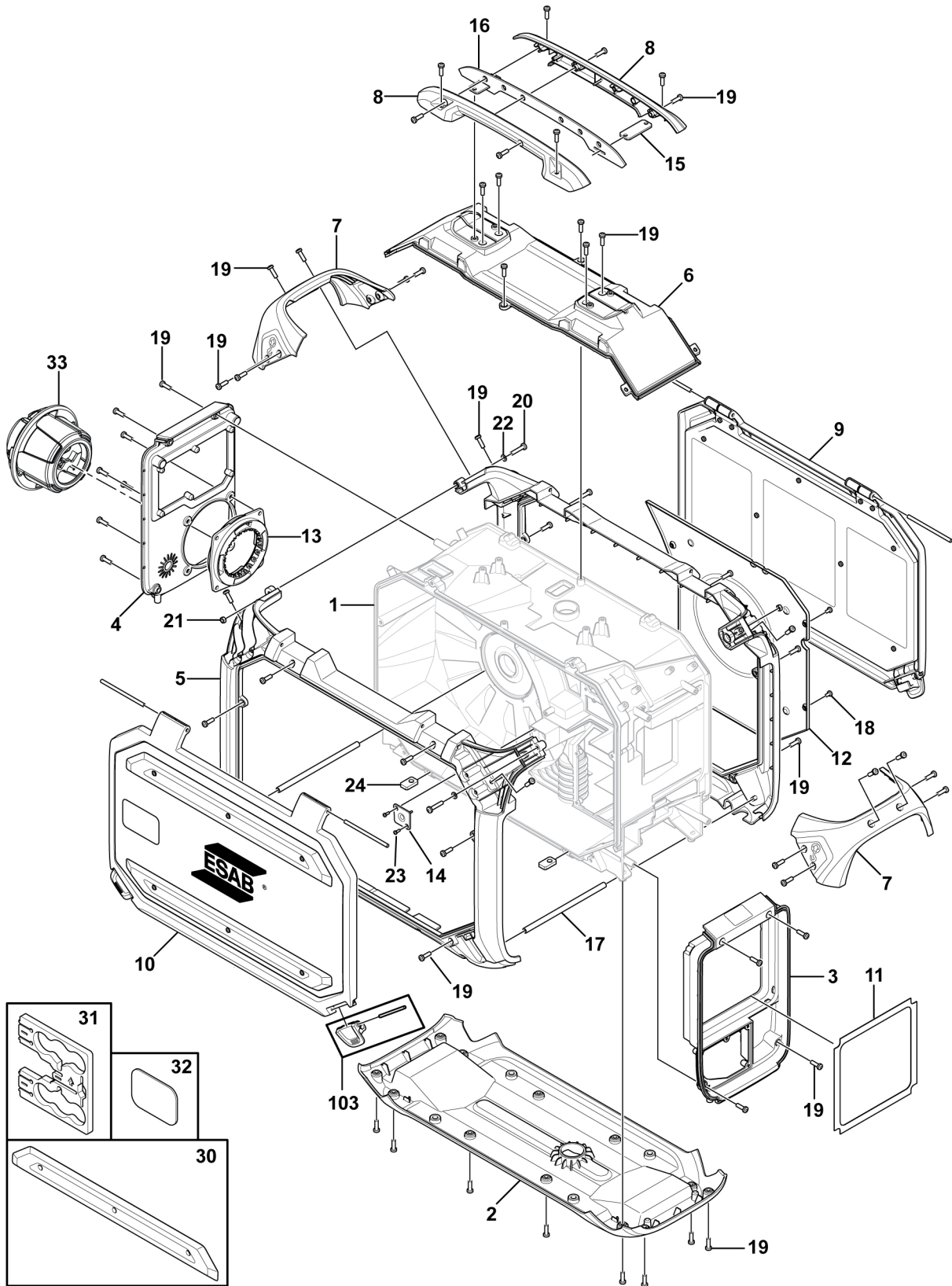
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# 1 SPARE PARTS

## 1.1 HOUSING MODULE

Item	Qty	Ordering no.	Denomination	Notes
1	1		Inner frame	
2	1	0445 763 001	Bottom panel	
3	1	0445 764 001	Front panel	
4	1	0445 765 001	Rear panel	
5	2	0445 766 001	Outer frame	
6	1	0445 767 001	Top panel	
7	2	0445 768 001	Handle cover	
8	2		Top handle	See item 101.
9	1	0445 780 880	Door complete right	
10	1	0464 694 880	Door left	The doors are supplied without internal decals. See item 102. Including item 103.
11	1	0446 035 001	Gasket user interface	
12	1	0446 005 001	Cover panel	
13	1	0445 810 001	Strain relief inner part	
14	1	0445 777 001	Inductor cover	
15	2		Handle bracket	See item 101.
16	1		Top handle frame	See item 101.
17	2		Hose 0.17 m, PVC, 9 mm outer diameter, 5 mm inner diameter	
18	4		Screw MRT M4×8	
19	67		Screw Remform 5×16	See item 101.
20	2		Screw MRT M5×25	
21	4		Nut 6K steel 8.8 M5	
22	4		Plain washer 5-200 HV-A2K	
23	2	0194 153 222	Screw Remform Torx 3X8	
24	4	0446 011 001	Rectangular nut M8	
26	1	0446 648 001	Warning+connector wo water AVS	
27	1	0445 880 002	ESAB Logo Decal	
28	1	0445 786 001	Side decal right	
29	1	0445 786 007	Side decal left	
30	4	0445 782 001	Bumper	
31	1	0446 034 001	RF300 S+W parts storage foam	
32	1	0445 832 001	Spool window	
33	1	A000 100 668	Interconnection strain relief module	Only for CE variant





## 1.2 FEEDER MECHANISM MODULE

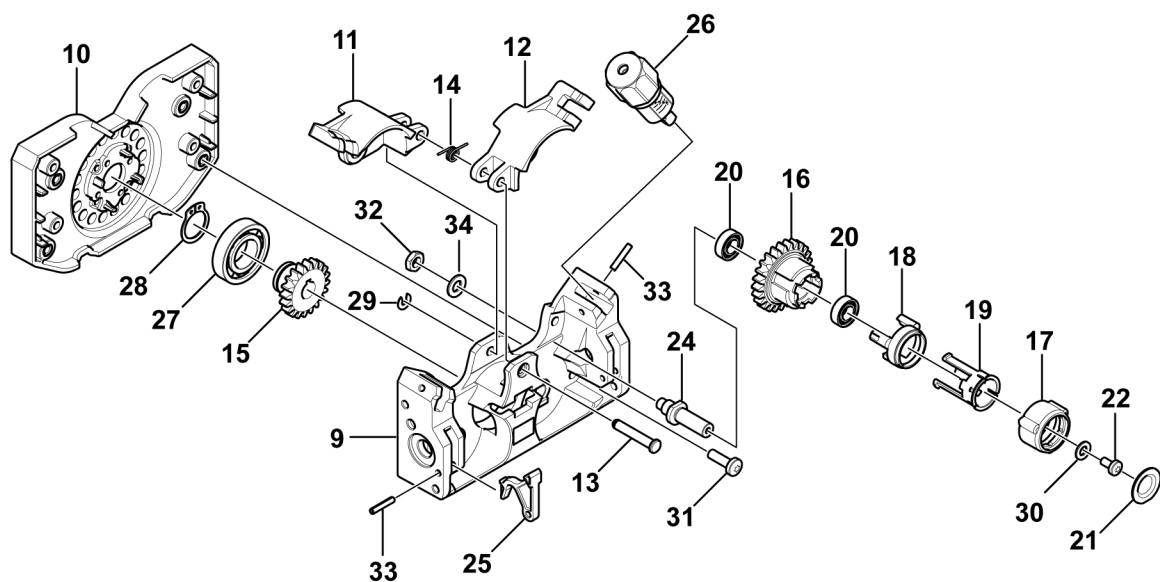
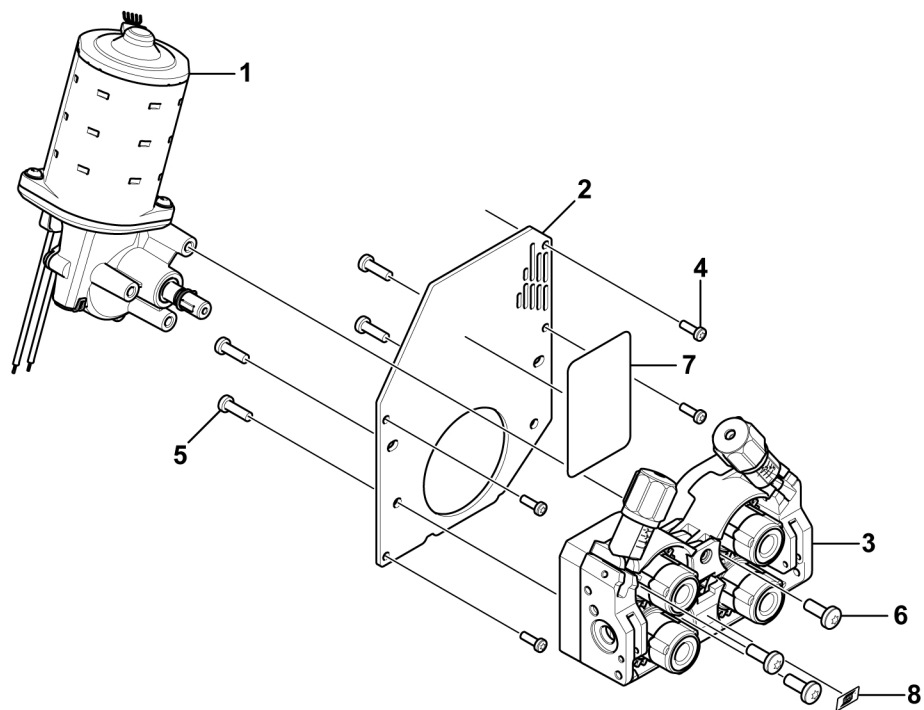
C = component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	1	0465 827 880	Drive unit wire feeder		
2	1	0446 010 001	Adaptor plate		
3	1		Feeder mechanism	See item 204.	
4	4	0194 153 292	Screw Remform Torx 4×12		
5	4	0194 153 330	Screw Remform Torx 5×16		
6	3		Screw MRT M6×16		
7	1		Warning decal pinching		
8	1	0445 916 001	ESAB logo silver		
9	1		Front plate	See item 204.	
10	1		Back plate	See item 204.	
11	1	0445 818 002	Swing arm left	See item 204.	
12	1	0445 818 001	Swing arm right	See item 204.	
13	1		Swing arm shaft	See items 202 and 204.	
14	1	0445 839 001	Lift spring	See items 202 and 204.	
15	1	0445 820 001	Motor pinion	See items 203 and 204.	
16	4		Gear hub	See item 203.	
17	4		Bezel	See item 203.	
18	4		Driver	See item 203.	
19	4		Retainer	See item 203.	
20	8		Bearing 8×16×5	See item 203.	
21	4		Cover	See item 203.	
22	4		Screw MRT M4×8	See item 203.	
24	4	0445 841 001	Feed roll shaft		
25	2	0446 059 001	Nozzle lever		
26	2	0445 831 880	Tensioner unit assembly		
27	1		Bearing, 17×35×8 mm	See item 201.	
28	1		Lock ring Ø17	See item 201.	
29	1		Circlip Ø6/4	See item 202.	
30	4		Washer M4	See item 203.	
31	4		Screw MRT M5×16		
32	4	0349 312 091	Hexagon thin nut		
33	4		Spring pin, Ø3×16	See item 204.	
34	4		Cup spring		

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Item	Ordering no.	Denomination	Notes
201	0464 667 883	Bearing and lock ring kit	Including items 27 and 28
202	0464 667 887	Swing arm shaft kit	Including items 13, 14 and 29
203	0464 667 893	Gear hub complete kit	Including items 15–22 and 30
204	0464 667 886	Feeder mechanism kit	Including items 9–15 and 33

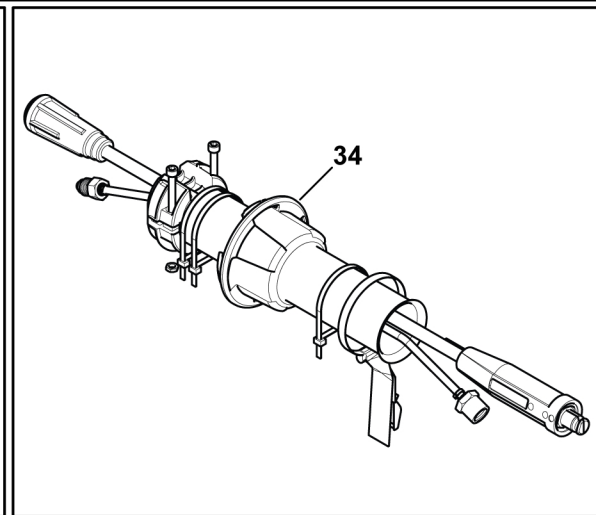
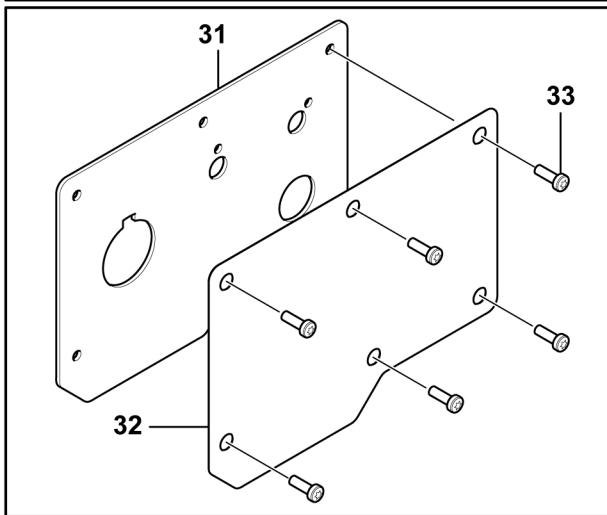
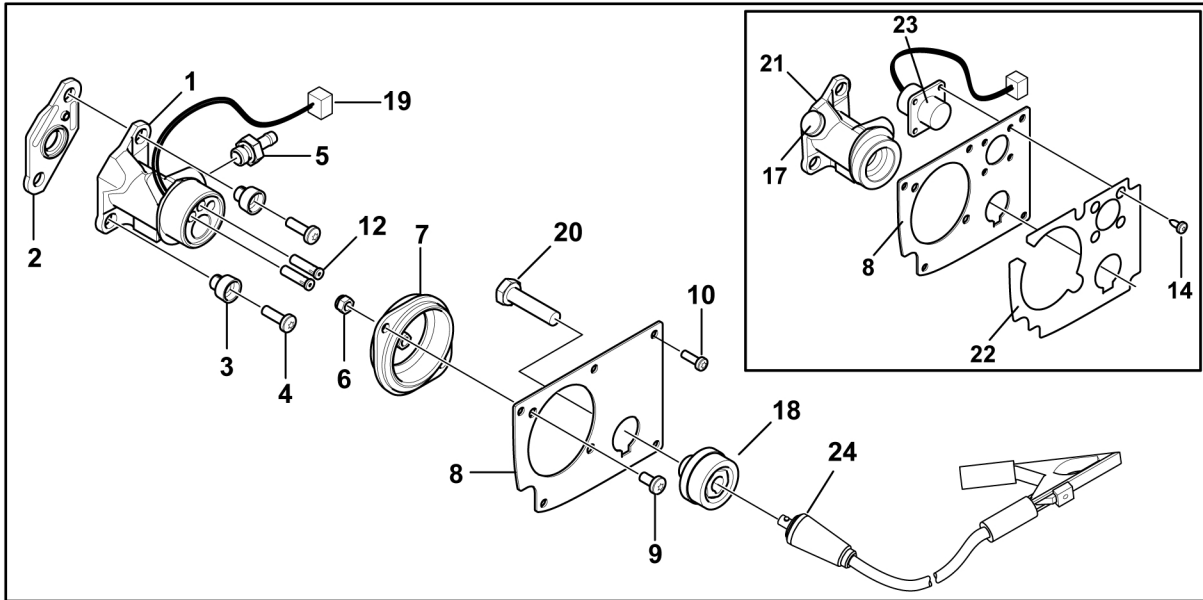
For feeder mechanism **wear** parts, see "**WEAR PARTS**", page 20.



## 1.3 FRONT AND REAR INTERFACE MODULES

C = component designation in the circuit diagram

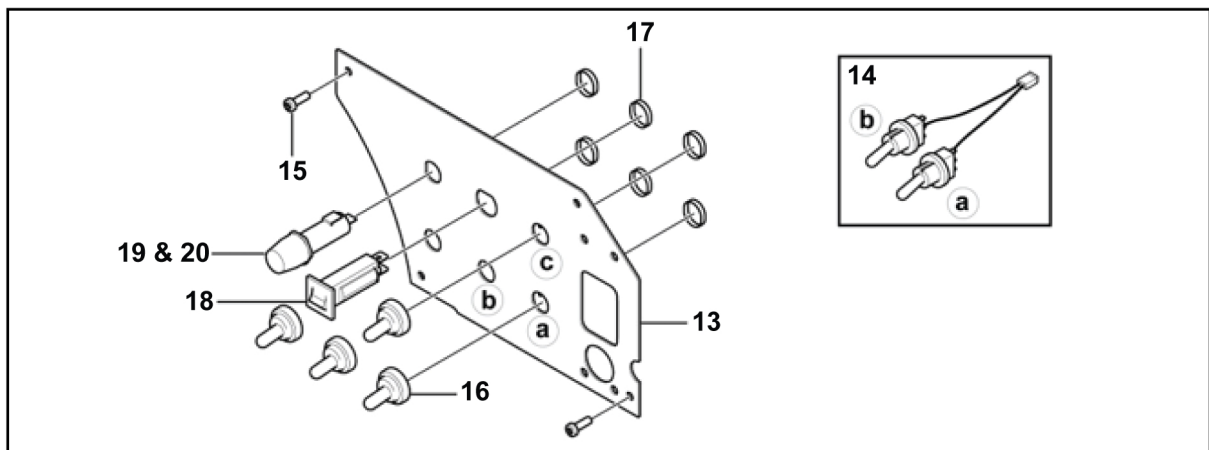
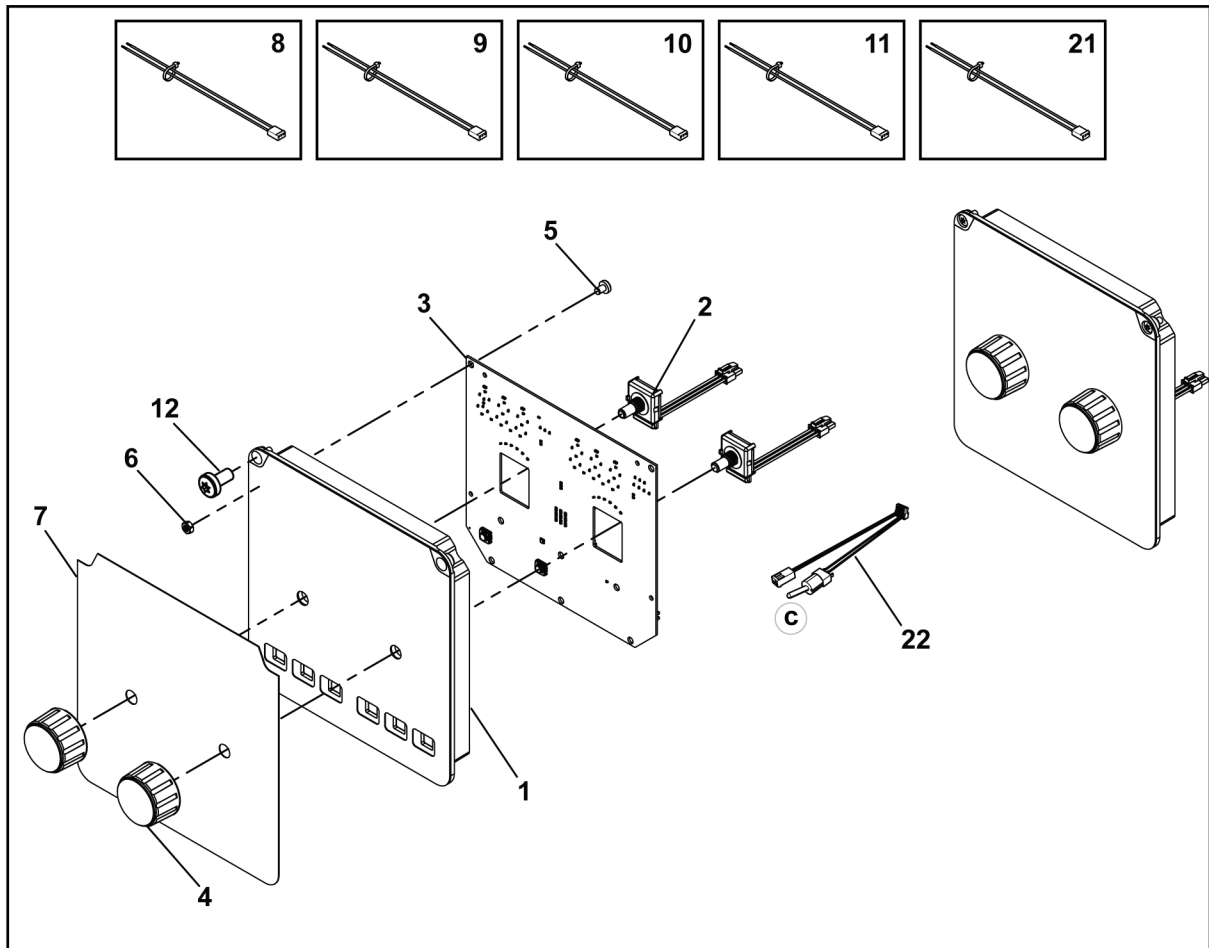
Item	Qty	Ordering no.	Denomination	Notes	C
<b>Front interface module:</b>					
1	1		Euro connector	See item 301.	
2	1		Torch Connector Insulator	See item 301 and 302.	
3	2		Screw Insulator	See item 301 and 302.	
4	2	0194 277 329	Screw MRT M5X16	See item 301 and 302.	
5	1	0445 856 001	Brass Fitting		
6	2		Nut locking 5 BH6		
7	1		Torch Connector Seat	See item 301 and 302.	
8	1	0446 643 002	Interface Plate Front Assy. AVS	For CE variant	
		0446 643 880		For CSA variant	
9	2		Screw MRT M5x10		
10	5		Screw Remform 4x12		
12	2		Insulating sleeve OrigMag	See item 301.	
14	4	0194 119 201	Screw RTS ST3,5X9,5		
17	1	0446 026 001	Thumb Screw		
18	1	0160 362 880	OKC Machine contact 25mm <sup>2</sup>		
19	1	0446 620 880	Trigger cable harness euro	See item 301.	
20	1	0349 481 350	Hexagon screw		
21	1		Tweco 4 connector	See item 302.	
22	1	0446 644 002	Front Overlay Tweco AVS		
23	1	0446 620 881	Trigger cable harness Tweco		
24	1	0446 653 880	Return cable harness AVS		
<b>Rear interface module:</b>					
31	1	0446 004 001	Interface plate rear		
32	1	0445 881 001	Rear Plate overlay		
33	6		Screw Remform Torx 4x12		
34	1	0446 675 881	Interconnection cable SR NA	Only for Tweco connections.	
<b>Item</b>	<b>Ordering no.</b>	<b>Denomination</b>		<b>Notes</b>	
301	0464 738 880	Euro torch connector kit		Including items 1, 2, 3, 4, 7, 12 and 19. It can be used as a retrofit for Tweco connectors.	
302	0464 667 899	Tweco 4 torch connector kit		Including items 2, 3, 4, 7 and 21.	



## 1.4 CONTROL PANELS

C = component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
<b>External control panel module:</b>					
1	1		Frame external User interface	See item 401 and 402.	
2	2	0193 912 005	Encoder complete	See item 402.	
3	1	0440 719 880	HMI PCBA WCC	Pre configured PCB. See item 402.	13AP3
4	2	0321 475 893	Knob D36-1/4IN	See item 402.	
5	8		Screw MRT M4×6 black	See item 401 and 402.	
6	8		Nut 6K steel 8.8 M4	See item 401 and 402.	
7	1		Decal External UI basic	See item 401 and 402.	
8	1	0448 169 880	External UI harness	See item 402.	
9	1	0448 165 880	WFS & CC/CV harness	See item 402.	
10	1	0458 681 932	CAN cable 932	See item 402.	
11	1	0448 112 880	Service harness		
12	2		Screw MRT M4X8 black		
<b>Internal UI module AVE ECHO:</b>					
13	1	0446 649 880	Internal setting plate Assy AVS		
14	1	A000 100 457	Internal UI Cable Harness AVS ECHO	Including toggle switches, see illustration.	
15	4		Screw Remform 4x12 black		
16	4	0194 423 901	Sealing Knitter		
17	6		Cable Binders		
18	1	950874 0004 487 147	Circuit breaker 7amp 32V DC		CB1
19	1	634709 0558 101 253	Fuse holder 15A 250V panel MT		
20	1	13735464 0558 101 254	Fuse SLO-BLO 10.00A 250V DU-EL		F1
21	1	0446 630 881	Weld supply harness AVS ECHO		
22	1	0446 973 880	Solenoid CB harness		
<b>Item</b>	<b>Ordering no.</b>	<b>Denomination</b>	<b>Notes</b>		
401	0464 663 327	External frame UI kit	Including items 1, 5, 6 and 7.		
402	0448 161 880	External UI basic complete	Including items 1- 10.		

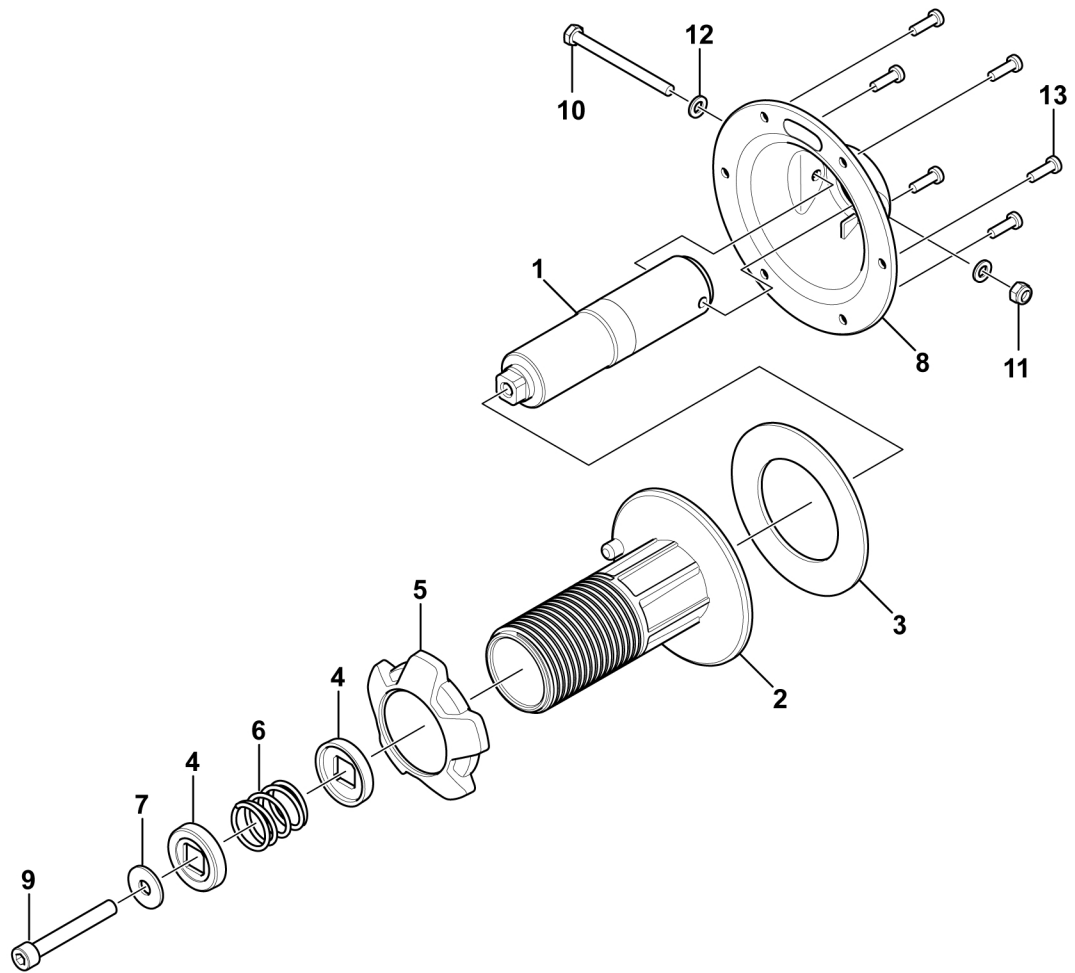


## 1.5 BOBBIN HOLDER

C = component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	1		Brake hub axle	See item 501.	
2	1	0445 794 001	Brake hub sleeve		
3	1	0445 613 001	Brake hub friction pad	See item 501. Tape included.	
4	2		Brake hub spring seat	See item 502.	
5	1	0445 779 001	Brake hub nut		
6	1		Brake hub spring	See item 502.	
7	1		Washer RB 24×8.4×2	See item 502.	
8	1	0446 006 001	RF300 bobbin console		
9	1		Screw MC6S M8×60	See item 502.	
10	1		Screw M6S M6×70	See item 501.	
11	1		Nut LOC-KING 6 BH6	See item 501.	
12	2		Washer BRB D12/6.4×1.5		
13	6	0194 153 330	Screw Remform Torx 5×16		

Item	Ordering no.	Denomination	Notes
501	0464 667 881	Brake hub axle kit	Including items 1, 3, 10 and 11
502	0464 667 882	Brake hub spring seat kit	Including items 4, 6, 7 and 9



## 1.6 SYSTEM CONTROL MODULE

C = component designation in the circuit diagram

Item	Qty	Ordering no.	Denomination	Notes	C
1	1	0445 776 002	Multi consol		
2	6	0194 297 001	Spacer 9.5 mm		
3	1	0440 555 880	PCBA Control board AVS		13AP1
4	1	0446 251 880	Proximity sensor harness		
5	1		Torch copper bar AVS	See item 601.	
6	1	0446 626 880	Interface plate internal AVS		
7	1	0447 616 001	Contactora 1 POLE 12 VDC 500 ADC		
8	1	0446 622 001	Contactora cover AVS		
9	2		Nut Locking 5 BH6		
10	1		OKC Copper bar AVS	See item 602.	
11	2	0446 628 001	Contact sleeve AVS		
12	1	0446 037 880	Fan complete		13EV2
13	2		LED board	See item 603.	
14	1		Lightning window front	See item 603.	
15	2		Screw remform 5x16		
16	4		Screw MRT FZB 5X6		
17	12		Screw remform 4x12 black		
18	1		Distance screw		
19	1		Screw MRT M4X6		
20	1		Nut 6K steel 8.8 M4		
21	1	0440 729 880	Interface PCBA WF		13AP2
22	1	0446 632 880	Board supply harness		
23	4		Cup spring	See item 601 and 602.	
24	2		Washer 10,5 A2K	See item 601 and 602.	
25	3		Screw M6S M10X20 8.8 fzb	See item 601 and 602.	
26	1	0446 633 001	Stepped Fastener AVS		
27	1	0160 609 881	Machine Connection dinse		
28	2		PCBA LED adhesive gasket	See item 603.	
29	1	0349 312 952	Flat pin connector	See item 602.	
30	1		PCBA current sensor	See item 604.	13AP7
31	1		Current sensor protection	See item 604.	
32	2	0394 516 005	Spacing screw M3x15		
33	2	0446 211 001	Screwed space sleeve M3x10		
34	2		Screw MRT FZB	M3x6	

1 SPARE PARTS

Item	Qty	Ordering no.	Denomination	Notes	C
35	1		Connector 3-pol	Not showing in the drawing	
36	2		Connector cover 3-pol	Not showing in the drawing	
37	(0.3 )		Hose DI 6.0	Not showing in the drawing	
38	2		Spring washer	Z 10.2 A2K PN-77/M-82005. See item 602.	
39	1	0448 163 880	OKC terminal harness AVS		
40	1		Nut 6K steel 4.6 M10	See item 602.	

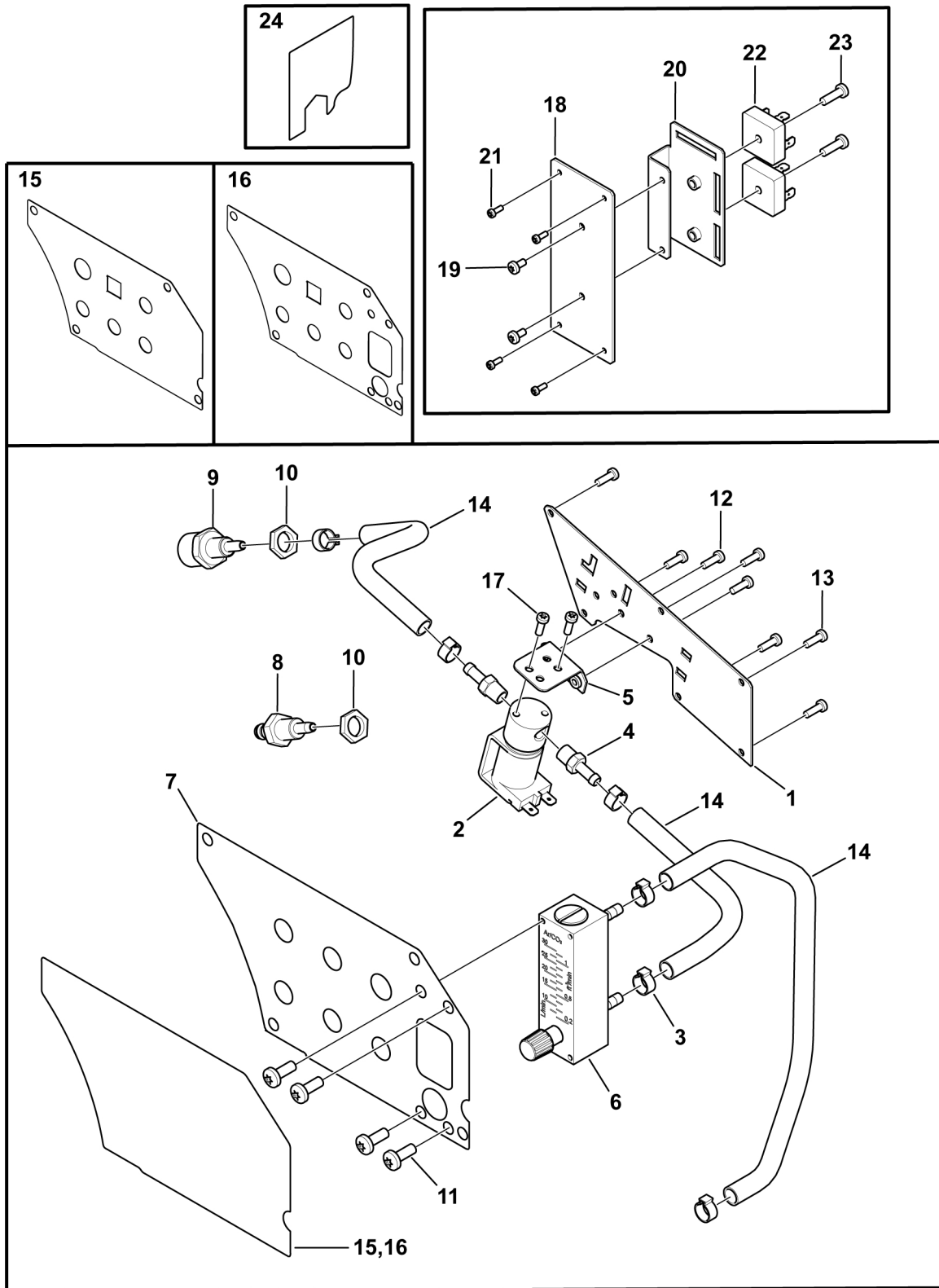
Item	Ordering no.	Denomination	Notes
601	0464 742 880	Torch copper bar kit RF AVS	Including items 5, 23 (4 pcs), 24 (2 pcs) and 25 (2 pcs).
602	0464 743 880	OKC copper bar kit RF AVS	Including items 10, 23 (2 pcs), 24 (1 pc), 25 (1 pc), 29, 38 and 40.
603	0464 680 886	LED illumination circuit board kit	Including items 13 (2 pcs), 14 and 28 (2 pcs).
604	0464 745 880	Current Sensor Kit RF AVS	Including items 30 and 31.



## 1.7 WATER, GAS AND HEAT KIT (13R1) MODULES



Item	Qty	Ordering no.	Denomination	Notes
1	1	0446 007 001	Gas adaptor plate AVS	
2	1	0447 626 001	Solenoid valve	See item 704.
3	6		Hose clamp	See item 703 and 704.
4	2	0446 636 001	Solenoid connector AVS	See item 704.
5	1	0446 637 001	Solenoid bracket AVS	
6	1	0445 013 883	Gas flow meter	
7	1		Int setting plate Assy AVS	Refer control panel module.
8	1		Nipple	See item 701.
9	1		Female threaded gas nipple AVS	See item 702.
10	1		Coupler nut LPH35	See item 701 and 702.
11	4		Screw MRT M4x12 Black	
12	2		Screw MRT M4x8 black	
13	6	0194 153 292	Screw remform 4x12 black	
14	-		Gas hose	In units with rotameter, 0.635 m of hose is needed. In units without rotameter, 0.46 m of hose is needed. See item 703.
15	1	0446 640 001	Int. UI basic decal AVS	Without rotameter variants.
16	1	0446 640 002	Int. UI decal rotameter AVS	With rotameter variants.
17	2	0446 683 001	Screw 8-32 x 3/8	See item 704.
18	1	0446 009 001	Heater plate	
19	2		Screw MRT FZB M4X8	
20	1	0446 651 001	Rectifier plate AVS	
21	4		Screw MRT FZB M3X8	
22	2	13730469	Rectifier bridge 35A 400V	
23	2		Screw MRT FZB 5X16	
24	1	0445 778 001	Water outlet overlay	




Item	Ordering no.	Denomination	Notes
701	0464 693 880	Nipple kit gas module	Including items 8 and 10.
702	0464 746 880	Nipple Kit CSA	Including items 9 and 10.
703	0464 663 080	Gas hose with clamp kit	Including items 3 (6 pcs) and 14 (0.635 m).
704	0464 663 089	Solenoid valve kit	Including items 2, 3 (2 pcs) 4 and 17.





## 1.8 WEAR PARTS




### Fe, Ss and cored wire

Wire diameter (in.) (mm)	.023 0.6	.030 0.8	.040 0.9/1. 0	.045 1.2	.052 1.4	1/16 1.6	.070 1.8	5/64 2.0	 Feed roller
<b>V-groove</b> 	<b>X</b>	<b>X</b>							0445 850 001
		<b>X</b>	<b>X</b>						0445 850 002
			<b>X</b>						0445 850 003
			<b>X</b>	<b>X</b>					<b>0445 850 004</b>
				<b>X</b>					0445 850 005
					<b>X</b>	<b>X</b>			0445 850 006
								<b>X</b>	0445 850 007

Inlet wire guide 	Middle wire guide 	Outlet wire guide 
0445 822 001 (2 mm)	0446 080 882	0445 830 883 (Tweco) 0445 830 881 (Euro)

### Cored wire – Different wire guides dependent on wire diameter!

Wire diameter (in.) (mm)	.040 0.9/1. 0	.045 1.2	.052 1.4	1/16 1.6	.070 1.8	5/64 2.0	3/32 2.4	 Feed roller
<b>V-K-knurled</b> 	<b>X</b>	<b>X</b>						0445 850 030
		<b>X</b>						0445 850 031
		<b>X</b>	<b>X</b>					0445 850 032
				<b>X</b>				0445 850 033
					<b>X</b>			0445 850 034
						<b>X</b>		0445 850 035
							<b>X</b>	0445 850 036

	Inlet wire guide 	Middle wire guide 	Outlet wire guide 
<b>Wire diameter 0.040–1/16 in. 0.9–1.6 mm</b>	0445 822 001 (2 mm)	0446 080 882	0445 830 883 (Tweco) 0445 830 881 (Euro)
<b>Wire diameter 0.070–3/32 in. 1.8–2.4 mm</b>	0445 822 002 (3 mm)	0446 080 883	0445 830 884 (Tweco) 0445 830 882 (Euro)





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