# ACCESSORIES GUIDE FOR SA WIRE FEEDING

SAFETY INSTRUCTIONS FOR OPERATING AND MAINTENANCE

ISSUE : EN Instruction manual REF : 8695 5239

REVISION : G

DATE : 10 - 2024 Original instructions



Thank you very much for the trust you have shown by choosing this piece of equipment. It will give you trouble-free service if it is used and maintained as recommended.
Its design, component specifications and manufacturing are in accordance with applicable European directives.
Please refer to the CE declaration enclosed to identify the directives applicable to it.
The manufacturer shall not be liable for any combination of parts not recommended by it.
For your safety, please follow the non-limitative list of recommendations and obligations, a large part of which are included in the Labour Code.
Please inform your supplier if you find any error in this instruction manual.

# **Table of contents**

A - SAFETY INSTRUCTIONS	1
B - DESCRIPTION OF STANDARD DUTY (SD) ASSEMBLY	
1 - Single-wire Standard Duty (SD) assembly:	2
2 - Dual-wire Standard Duty (SD) assembly:	6
C - DESCRIPTION OF HEAVY DUTY (HD) ASSEMBLY	8
1 - Single-wire Heavy Duty (HD) assembly:	8
2 - Dual-wire Heavy Duty (HD) assembly:	10
D - DESCRIPTION OF LSO TORCH ASSEMBLY	12
1 - Single-wire assembly for heavy-duty applications, Ø 2.4-5.8 mm, submerge	ed arc: 12
2 - Single-wire assembly for long stick out applications, $\varnothing$ 4 mm:	14
E - DESCRIPTION OF ASSEMBLY OF NARROW GAP TORCH	16
F - REEL INSTALLATION DESCRIPTION	18
1 - Installation of reel, 100 kg:	18
2 - Installation of reel, 25- 30 kg:	·21
PERSONAL NOTES	24

# **REVISIONS**

REVISION : A DATE : 06/21

DESCRIPTION PAGE

Created All

REVISION : B DATE : 10/21

DESCRIPTIONPAGEUpdated08/09/2010-11

REVISION : C DATE : 11/21

DESCRIPTIONPAGEUpdated08/09/2010-11

REVISION : D DATE : 01/22

DESCRIPTIONPAGEUpdated3-5-7-9-11-15

REVISION : E DATE : 10/22

DESCRIPTIONPAGEUpdated12-13-15

REVISION : F DATE : 03/23

DESCRIPTIONPAGEUpdate5;7;12-15

REVISION : G DATE : 09/24

DESCRIPTIONPAGEUpdate7-15-18-19-20-21-22

MAXSA/NA ————

#### **A - SAFETY INSTRUCTIONS**



The use of Personal Protective Equipment (PPE) is **mandatory**.



Clean the working area from time to time.



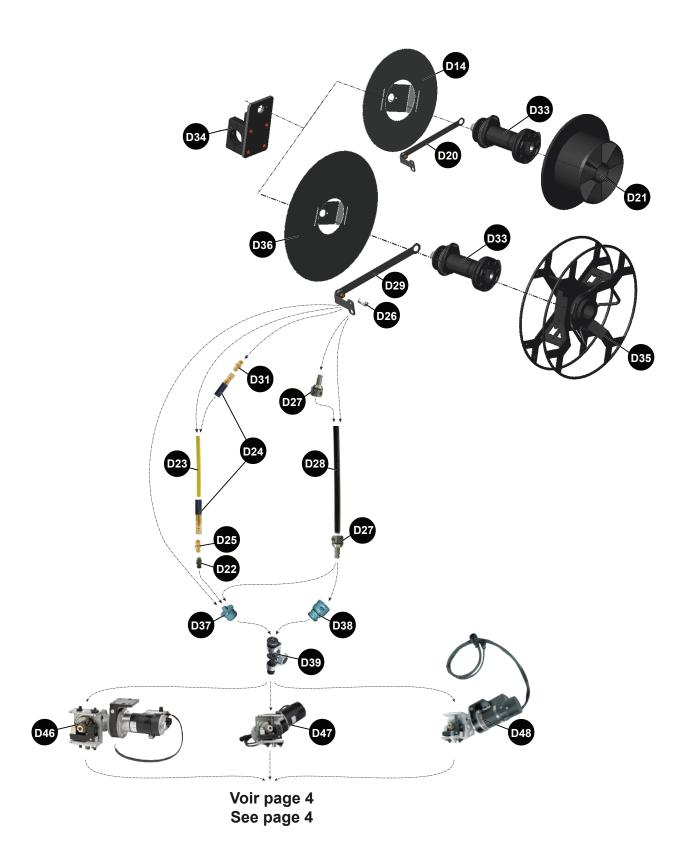
Machine maintenance  $\underline{must}$  be carried out with all the energy supplies switched off. The disconnection and padlocking of all energy sources is  $\underline{mandatory}$ .



Before starting any work on the torch, make sure that the power source is switched off.

User's guide

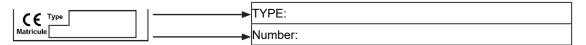
### 1 - Single-wire Standard Duty (SD) assembly:

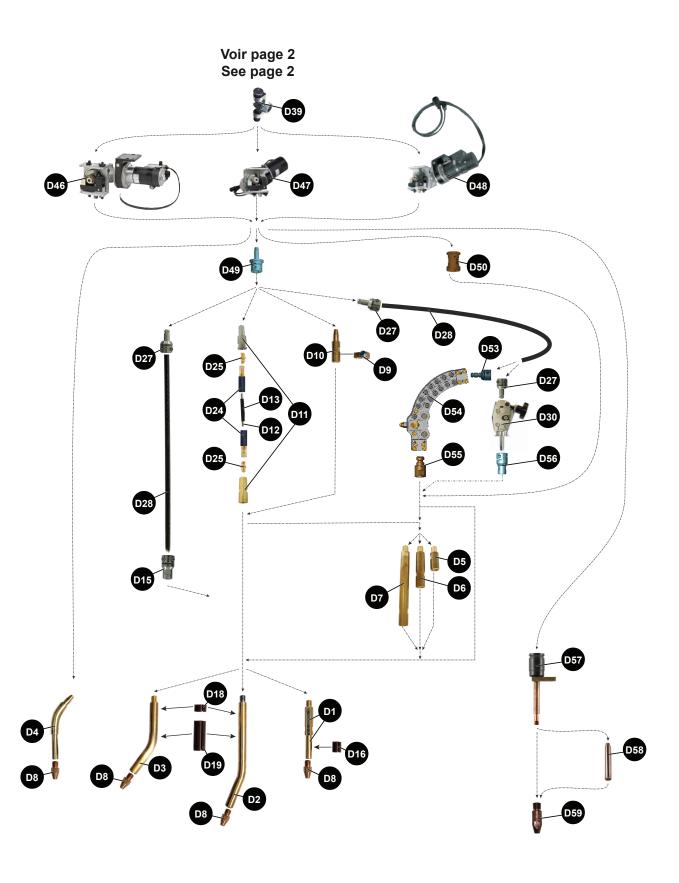


MAXSA/NA \_\_\_\_\_

<b>V</b>	normally held in stock
X	not in stock
	on demand
	on demand

		<u>. V</u>	
Ref.	Part no	Stock Order	Description
D14	W000403688		Ø 300 reel guard (for 15-16 kg reel)
D20	W000403698		Insulated sleeve fastening assembly (for 15-16 kg reel)
D21	W000378887		Ø 300 SA wire reel holder (for 15-16 kg reel)
D22	S91110403		Wire infeed guide
D23	W000373395		Yellow sleeve - linear m
D24	W000145285		Rotating fitting
D25	Z03710051		M12x100 nipple
D26	W000379507		Locking ring
D27	W000379485		Sleeve fitting assembly (> 1.6 m)
D28	W000382072		Wire sleeve (> 1.6 m)
D29	W000403697		Insulated sleeve fastening assembly (for 25 kg reel)
D31	P91095273		M12x100 male/male fitting
D33	K162-1		Wire feeder reel shaft
D34	W000403696		Wire reel shaft holder
D35	K1504-1		Ø 450 SA wire reel holder (for 25 kg reel)
D36	W000403699		Ø 450 reel guard (for 25 kg reel)
D37	P95094180		Single-wire end, Ø 31.5 - M12x1
D38	P95094177		Single-wire end, Ø 31.5 - Clamp Ø19
D39	K1733-5		Wire straightener
D46	K2312-2		MAXsa 29 wire feeder + Wire straightener (D39)
D47	K209A		NA-3SF/NA-4F wire feeder, Ø 2.4 to 5.6 mm
	K209B		NA-3SF/NA-4F wire feeder, Ø 1.6 to 2.4 mm
D48	K347A		NA-5SF wire feeder, Ø 2.4 to 5.6 mm
	K347B		NA-5SF wire feeder, Ø 1.6 to 2.4 mm

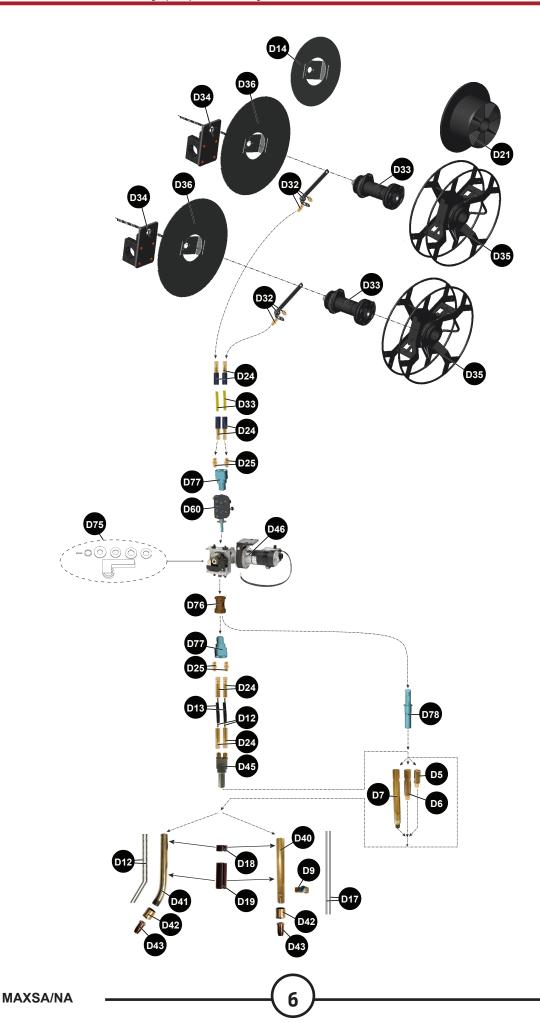




	<b>V</b>	normally held in stock
$\overline{}$	X	not in stock
		on demand

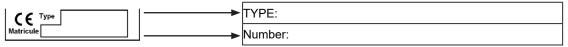
Ref.	Part no	Stock Order	Description
D1	W000234779		Shoe wire feed
D2	W000234780		Single-wire feed, 22° curve
D3	W000234781		Single-wire feed, 35° curve
D4	W000234782		Single-wire feed, 45° curve
D5	W000234774		Straight extension I = 50 mm
D6	W000234775		Straight extension I = 100 mm
D7	W000234776		Straight extension I = 200 mm
D8	W000315848		SD 1.6 mm single-wire nozzle
	W000315849		SD 2 mm single-wire nozzle
	W000315850		SD 2.4 mm single-wire nozzle
	W000315851		SD 3.2 mm single-wire nozzle
	W000315852		SD 4 mm single-wire nozzle
	W000315853		SD 5 mm single-wire nozzle
D9	W000234770		Current feed
D10	W000234773		Plate outfeed wire guide
D11	W000234777		Wire sleeve fitting assembly, 1.2 - 2.4 mm
D12	W000374666		Spring sleeve, 1.2 - 1.6 mm (I = 10 m)
	W000374667		Spring sleeve, 2 - 2.4 mm (I = 10 m)
D13	W000401805		Black Polypenco sleeve
D15	W000379483		Wire sleeve fitting (> 1.6 mm)
D16	W000139805		Insulating ring, Ø19 mm; I = 28 mm
D18	W000315844		Insulating ring, Ø25 mm; I = 20 mm
D19	W000352240		Insulating ring, Ø25 mm; I = 80 mm
D24	W000145285		Rotating fitting
D25	Z03710051		M12x100 nipple
D27	W000379485		Sleeve fitting assembly (> 1.6 m)
D28	W000382072		Wire sleeve (> 1.6 m)
D30 D39	W000234767		Wire straightener
D39 D46	K1733-5 K2312-2		Wire straightener  MAXsa 29 wire feeder + Wire straightener (D39)
D46	K209A		NA-3SF/NA-4F wire feeder, Ø 2.4 to 5.6 mm
D47	K209A		NA-3SF/NA-4F wire feeder, Ø 2.4 to 3.6 mm
D48	K347A		NA-5SF wire feeder, Ø 2.4 to 5.6 mm
D40	K347B		NA-5SF wire feeder, Ø 2.4 to 3.6 mm
D49	P95094237		Single-wire end, Ø 15.8 - Clamp Ø19
D50	AS-WS-95094257	<del>                                     </del>	Interface
D53	W000381680	<del>                                     </del>	Set of sleeve fittings for feed with bend
D54	W000381679		Roller type feed with bend
D55	W000381681		Wire feed fitting for feed with bend
D56	W000382613		Wire feed fitting
D57	K231-1		Wire feed
D58	KP2721-1		Extension
D59	S10125-5/64C		Ø 2 nozzle
	S10125-3/32C		Ø 2.4 nozzle
	S10125-1/8C		Ø 3.2 nozzle
	S10125-5/32C		Ø 4 nozzle
	S10125-5/16C		Ø 4.8 nozzle

C C Type		TYPE:
Matricule	<b></b>	Number:

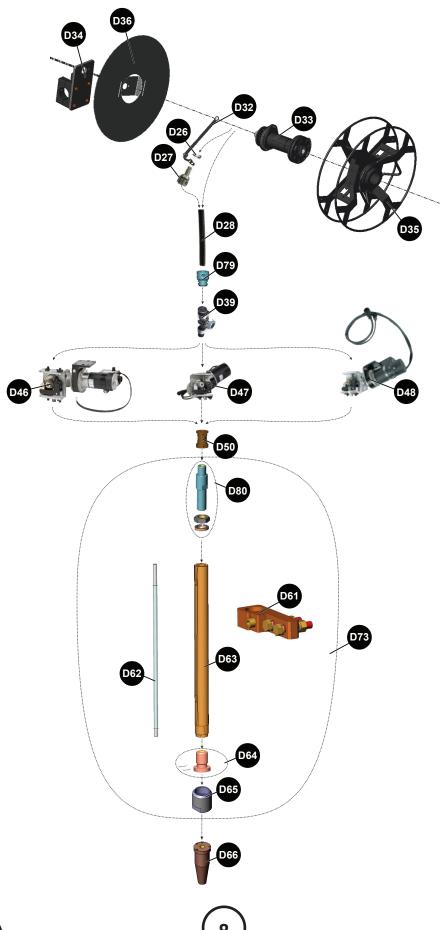


~	normally held in stock
X	not in stock
	on demand

	1		
Ref.	Part no	Stock Order	Description
D5	W000234774		Straight extension I = 50 mm
D6	W000234775		Straight extension I = 100 mm
D7	W000234776		Straight extension I = 200 mm
D9	W000234770		Current feed
D12	W000374666		Spring sleeve, 1.6 mm (I = 10 m)
D13	W000401805		Black Polypenco sleeve
D14	W000403688		Ø 300 reel guard (for 15-16 kg reel)
D17	W000373840		2 wire guide tubes, Ø 1.6 mm (I = 500 mm)
D18	W000315844		Insulating ring, Ø25 mm; I = 20 mm
D19	W000352240		Insulating ring, Ø25 mm; I = 80 mm
D21	W000378887		Ø 300 SA wire reel holder (16 kg reel, B300 only)
D23	W000373395		Yellow sleeve - linear m
D24	W000145285		Rotating fitting
D25	Z03710051		M12x100 nipple
D32	W000315701		Sleeve fastening support
D33	W000149164		Wire feeder reel shaft
D34	W000139679		Wire reel shaft holder
D35	W000315086		Ø 450 SA wire reel holder (for 25 kg reel)
D36	W000100148		Ø 450 reel guard (for 25 kg reel)
D40	W000379491		Straight dual-wire feed
D41	W000379493		Bent dual-wire feed, 35°
D42	W000373866		Tightening ring
	W000373839		Dual-wire extension, 60 mm (P91113163)
D43	W000315840		Wire nozzle, 2 x 1.6 mm
D44	W000379488		Direct dual-wire outfeed end, 1.6 mm
D45	W000379490		Dual-wire outfeed end
D46	K2312-2		MAXsa 29 wire feeder + Wire straightener (D39)
D60	P95094187		Dual-wire infeed end, 1.6 mm
D67	AS-WS-95094184		Dual-wire straightener
D71	P95094183		Dual-wire end, Ø 2.4
D75	KP1888-1		Dual-wire roller, Ø 1.2 to 1.6
	KP1888-2		Dual-wire roller, Ø 1.6 to 2
	9S514905		
	9ST12146-1		
	9SM8776-6		
	9S513165		
D76	AS-WS-95094257		Interface
D77	P95094187		Dual-wire infeed end, 1.6 mm
D78	P95094182		Dual-wire outfeed end, 1.6 mm

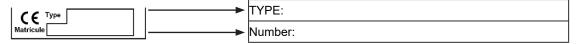


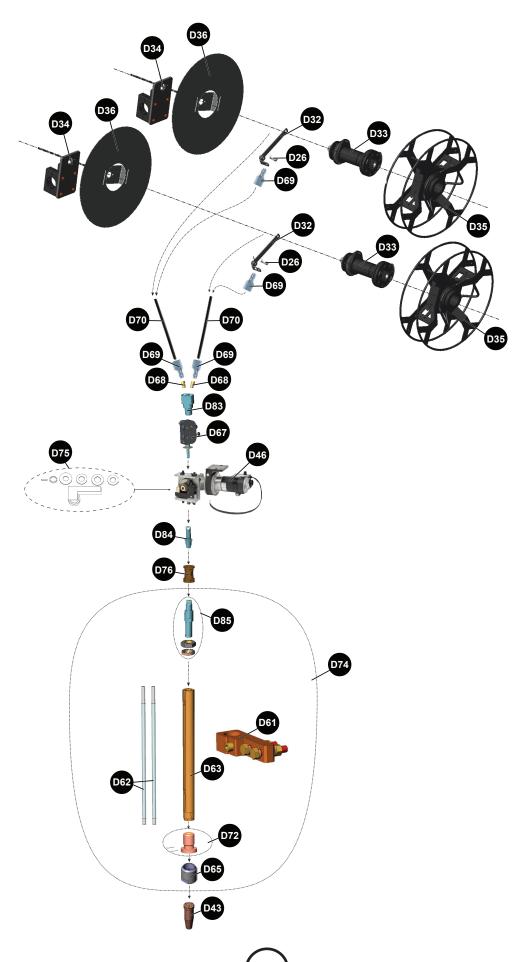
## 1 - Single-wire Heavy Duty (HD) assembly:



<b>V</b>	normally held in stock
X	not in stock
	on demand

Ref.	Part no	Stock Order	Description
D26	W000379507		Locking ring
D27	W000379485		Sleeve fitting assembly (> 1.6 mm)
D28	W000382072		Wire sleeve (> 1.6 mm)
D32	W000315701		Sleeve fastening support
D33	W000149164		Wire feeder reel shaft
D34	W000139679		Wire reel shaft holder
D35	W000315086		Ø 450 SA wire reel holder (for 25 kg reel)
D36	W000100148		Ø 450 reel guard (for 25 kg reel)
D39	K1733-5		Wire straightener
D46	K2312-2		MAXsa 29 wire feeder + Wire straightener (D39)
D47	K209A		NA-3SF/NA-4F wire feeder, Ø 2.4 to 5.6 mm
	K209B		NA-3SF/NA-4F wire feeder, Ø 1.6 to 2.4 mm
D48	K347A		NA-5SF wire feeder, Ø 2.4 to 5.6 mm
	K347B		NA-5SF wire feeder, Ø 1.6 to 2.4 mm
D50	AS-WS-95094257		Interface
D61	W000379770		Current supply ring
D62	W000379499		Wire conduit tube, 2.4 mm with insulation
	W000379498		Wire conduit tube, 3.2 to 5 mm with insulation
D63	W000379771		Right-hand torch body
D64	AS-WS-95094247		Single-wire ring, 2.4 mm
	AS-WS-95094248		Single-wire ring, 3.2 to 5 mm
D65	AS-WS-95094245		HD nozzle tightening nut
D66	W000377231		Single-wire nozzle, Ø2,4 mm HD
	W000377232		Single-wire nozzle, Ø3,2 mm HD
	W000377233		Single-wire nozzle, Ø4 mm HD
	W000377234		Single-wire nozzle, Ø5 mm HD
D73	AS-WS-95094225		Single-wire torch base, Ø2.4 mm HD
	AS-WS-95094228		Single-wire torch base, Ø3.2 to 5 mm HD
D79	P95094177		Single-wire end, Ø 31.5 - Clamp Ø19
D80	AS-WP-95094226		Single-wire sleeve, Ø 2.4 mm + nut + washer
	AS-WP-95094229		Single-wire sleeve, Ø 3.2 to 5 mm + nut + washer



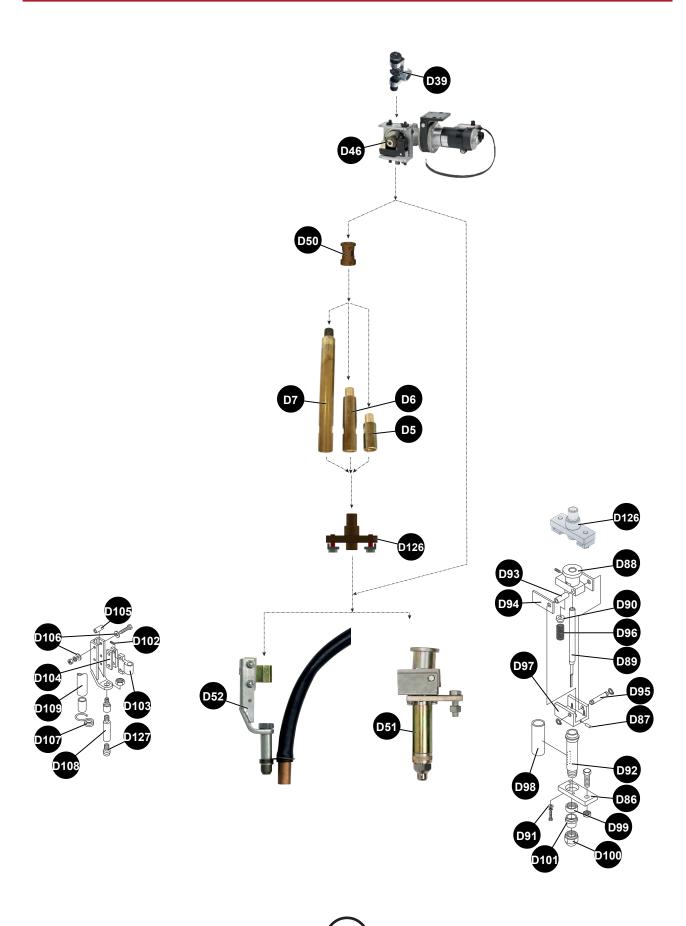


not in stock
on demand

D (	<b>D</b> (		
Ref.	Part no	Stock Order	Description
D26	W000379507		Locking ring
D32	W000315701		Sleeve fastening support
D33	W000149164		Wire feeder reel shaft
D34	W000139679		Wire reel shaft holder
D35	W000315086		Ø 450 SA wire reel holder (for 25 kg reel)
D36	W000100148		Ø 450 reel guard (for 25 kg reel)
D43	W000377229		Dual-wire nozzle, Ø2 mm HD
	W000377230		Dual-wire nozzle, Ø2.4 mm HD
D46	K2312-2		MAXsa 29 wire feeder + Wire straightener (D39)
D61	W000379770		Current supply ring
D62	W000379499		Wire conduit tube, 2.4 mm with insulation
D63	W000379771		Right-hand torch body
D65	AS-WS-95094245		HD nozzle tightening nut
D67	AS-WS-95094184		Dual-wire straightener
D68	W000379504		EB female connector
D69	W000379503		Male connector for EB sleeve
D70	W000379505		EB sleeve
D72	AS-WS-95094244		Dual-wire ring, Ø2 to 2.4 mm
D74	AS-WP-95094231		Dual-wire torch base, Ø2 to 2.4 mm HD
D75	KP1888-1		Dual-wire roller, Ø 1.2 to 1.6
	KP1888-2		Dual-wire roller, Ø 1.6 to 2
	KP1889-1		Dual-wire roller, Ø 2.4
	9S514905		
	9ST12146-1		
	9SM8776-6		
	9S513165		
D76	AS-WS-95094257		Interface
D83	P95094235		Dual-wire infeed end, 2.4 mm
D84	AS-WP-95094233		Dual-wire outfeed end, 2.4 mm
D85	AS-WP-95094232		Dual-wire sleeve + nut + washer

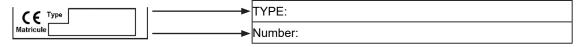
C C Type	<b></b>	TYPE:
Matricule	<b></b>	Number:

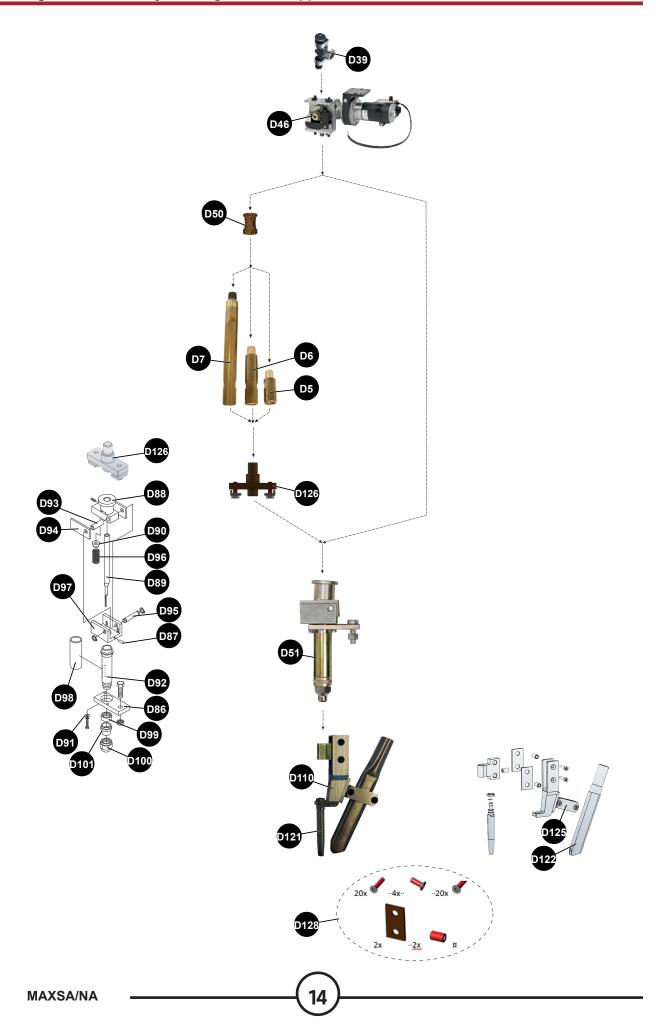
1 - Single-wire assembly for heavy-duty applications,  $\varnothing$  2.4-5.8 mm, submerged arc:



	<b>'</b>	normally held in stock
_	X	not in stock
		on demand

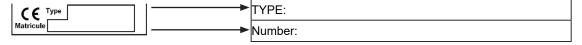
Ref.	Part no	Stock	Order	Description
D5	W000234774			Straight extension I = 50 mm
D6	W000234775			Straight extension I = 100 mm
D7	W000234776			Straight extension I = 200 mm
D39	K1733-5			Wire straightener
D46	K2312-2			MAXsa 29 wire feeder + Wire straightener (D39)
	KP1899			Drive roller kit
	KP1899-1			Drive roller, 2.7-5.5 mm
	KP1899-2			Drive roller, 1.6-2-2.4mm
	KP1899-3		İ	Drive roller, 0.9-1.2-1.3mm
D50	AS-WS-95094257		İ	Interface
D51	K148A			LSO torch, Ø 2.4 to 3.2 mm
	K148B			LSO torch, Ø 4 to 4.8 mm
D52	K149-5/32			Ø 4 extension
D86	9SS12576			Connecting plate
D87	9ST9967-35			Pin
D88	9SM10340-1			Pivot body
D89	KP1974-1			Assembled wire guide, 3/32, .120, 1/8
	KP1974-2			Assembled wire guide, 5/32, 3/16
D90	9ST12157			Insulating spacer
D91	9SS9262-23			Plain washer
D92	9SM11327			Nozzle body
D93	9ST7028-51			Insulating tube
D94	9SS12579			Insulator
D95	9ST12158			Pivot shaft
D96	9ST10247-8			Spring
D97	9SS13762			Nozzle holder
D98	9SS7748-64			Cover with window
D99	9SS13805			Wire guard clamp
D100	9SS13804			Nozzle clamp
D101	KP1973-1			Nozzle tip
D102	9SS13758			Assembly unit
D103	9SS13757			Extension arm assembly
D104	9ST8477-16			Insulator
D105	T11851-3			Insulating tube
D106	S9262-23			Plain washer
D107	9ST12929			Clamp for flux hose
D108	KP1975-2			Tube extension
D109	9SS7748-35			Flux pipe
D126	AS-WS-95093460			K148 adaptation kit
D127	KP1976-1			Extension tube guide
	KP1976-3			Extension tube guide

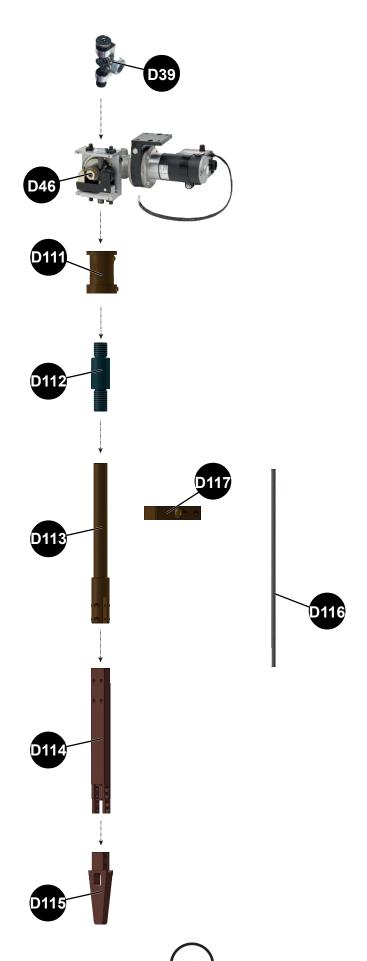




	~	normally held in stock
_	X	not in stock
		on demand

Ref.	Part no	Stock	Order	Description
D5	W000234774			Straight extension I = 50 mm
D6	W000234775			Straight extension I = 100 mm
D7	W000234776			Straight extension I = 200 mm
D39	K1733-5			Wire straightener
D46	K2312-2			MAXsa 29 wire feeder + Wire straightener (D39)
D50	AS-WS-95094257			Interface
D51	K148A			LSO torch, Ø 2.4 to 3.2 mm
	K148B			LSO torch, Ø 4 to 4.8 mm
D86	9SS12576			Connecting plate
D87	9ST9967-35			Pin
D88	9SM10340-1			Pivot body
D89	KP1974-1			Assembled wire guide, 3/32, .120, 1/8
	KP1974-2			Assembled wire guide, 5/32, 3/16
D90	9ST12157			Insulating spacer
D91	9SS9262-23			Plain washer
D92	9SM11327			Nozzle body
D93	9ST7028-51			Insulating tube
D94	9SS12579			Insulator
D95	9ST12158			Pivot shaft
D96	9ST10247-8			Spring
D97	9SS13762			Nozzle holder
D98	9SS7748-64			Cover with window
D99	9SS13805			Wire guard clamp
D100	9SS13804			Nozzle clamp
D101	KP1973-1			Nozzle tip
D110	AS-WP-95093400			LSO extension base
D121	AS-WP-95093408			Brazed LSO nozzle, 110mm long
D122	AS-WW-95093420			Flux supply nozzle
D125	AS-WS-95093425			Base support
D126	AS-WS-95093460			K148 adaptation kit
D128	AS-WS-95093426			Kit of screws and insulation for long stick out extension

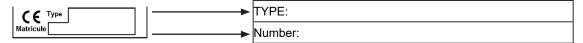




MAXSA/NA

	<b>'</b>	normally held in stock
	X	not in stock
		on demand
_ '		UII UCIIIAIIU

Ref.	Part no	Stock	Order	Description
D39	K1733-5			Wire straightener
D46	K2312-2			MAXsa 29 wire feeder + Wire straightener (D39)
D47	K209A			NA-3SF/NA-4F wire feeder, Ø 2.4 to 5.6 mm
	K209B			NA-3SF/NA-4F wire feeder, Ø 1.6 to 2.4 mm
D48	K347A			<b>NA-5SF</b> wire feeder, Ø 2.4 to 5.6 mm
	K347B			<b>NA-5SF</b> wire feeder, Ø 1.6 to 2.4 mm
D111	AS-WS-95094257			Interface
D112	AS-WS-95094251			Torch connector
D113	AS-WS-95094252			Torch holder
D114	AS-WS-95094253			LG200 torch
D115	W000378020			Contact tip, 4.0 mm
	W000378027			Contact tip, 3.2 mm
D116	AS-WS-95094254			Pipe
D117	AS-WS-95094255			Current feed
	AS-WS-95094256			Bag of screws



#### 1 - Installation of reel, 100 kg:













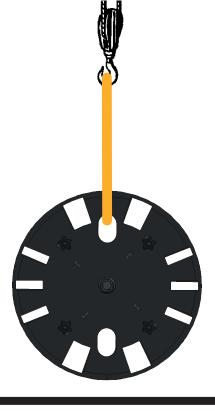
- » Work on the reel and its holder may only be carried out by experienced personnel who are trained in machine-related risks.
- » Work on the reel and its holder must be carried out with the utilities disconnected. The disconnection and padlocking of all energy sources is mandatory.
- » <u>CAUTION:</u> All work at heights (maintenance, troubleshooting etc.) must be carried out with appropriate personnel lifting equipment.
- » The use of Personal Protective Equipment (PPE) and work clothing covering the body is mandatory in the work area. Do not wear a tie and keep your hair tied back securely.

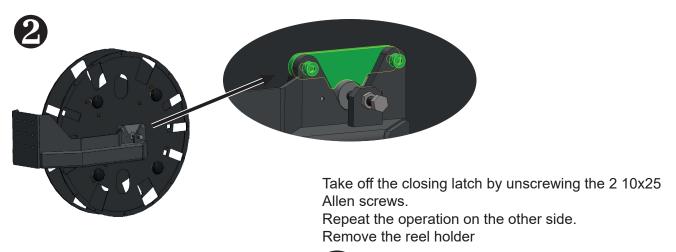


Sling the reel holder

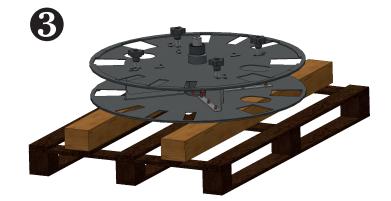
\* Weight with full reel: 130 daN

\* Weight with empty reel: 30 daN

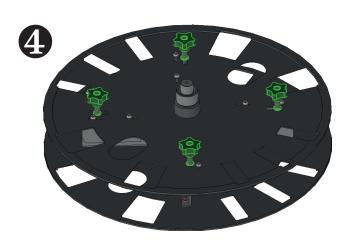




MAXSA/NA



Place the assembly flat on a supporting surface (e.g. pallet)

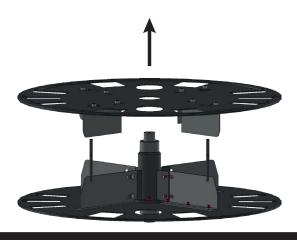


Unscrew the four wheels and then remove the springs and washers to release the shafts.



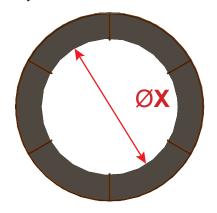
6

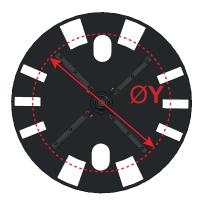
Lift off the top of the reel holder.



If there is an empty reel, take it off and put in a wire reel.

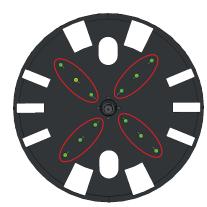
NB: It is absolutely necessary to check that the diameter of the reel to install is compatible with the adjustment of the reel holder  $\bigcirc$  X =  $\bigcirc$ Y.





To adjust, loosen the 20 M8x20 Allen screws on the lower part of the reel holder and adjust the four centring plates. Apply the same adjustment to the upper part of the reel holder (8 M8x20 Allen screws)

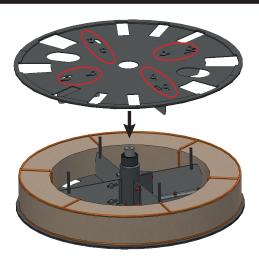






Install the wire reel and tighten the 20 M8x20 Allen screws.

The 8 screws on the upper part can be tightened after the upper part has been reassembled.





Reverse the procedure for reassembly.





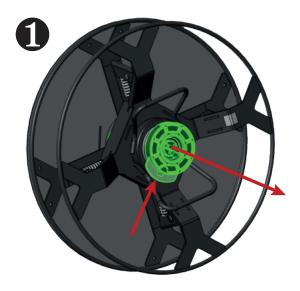








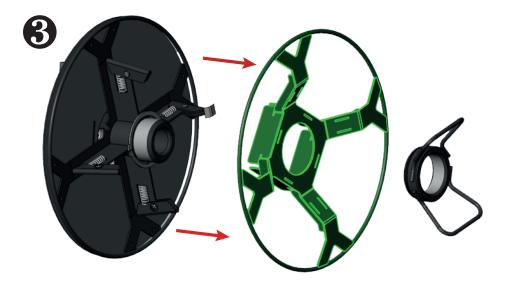
- » Work on the reel and its holder may only be carried out by experienced personnel who are trained in machine-related risks.
- » Work on the reel and its holder must be carried out with the utilities disconnected. The disconnection and padlocking of all energy sources is mandatory.
- » <u>CAUTION:</u> All work at heights (maintenance, troubleshooting etc.) must be carried out with appropriate personnel lifting equipment.
- » The use of Personal Protective Equipment (PPE) and work clothing covering the body is mandatory in the work area. Do not wear a tie and keep your hair tied back securely.



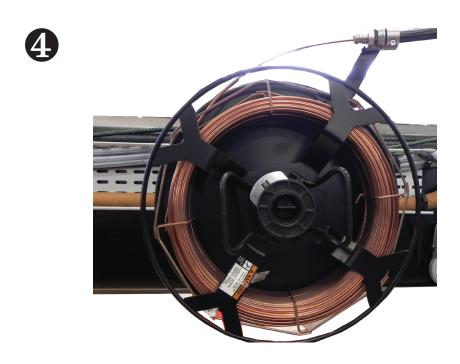
Press and remove the locking element K162-1



Unscrew and remove the locking nut 95093534



Remove the reel holder



Install the wire reel and reverse the procedure for reassembly.

#### PERSONAL NOTES

LINCOLN ELECTRIC France S.A.S. Parthenay site 10 rue Lavoisier
BP009 79201 Parthenay Cedex 01
www.lincolnelectriceurope.com

MAXSA/NA — 2