

M12183B, 83-319A, 117-093

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Item	Lincoln	Stock #	Customer #	Description
1		S26399-23	B7037370	Torch Lever
2		S26399-24	B7038370	Handgrip, Left
3		334-500-400, KH724	M15598 (83-636)	Tapered Nozzle
		334-501-400, KH729	M15599	Spot Nozzle
4		KH710, KP11-23	M15522 (83-393)	Contact Tips .024"
		KH711, KP11-30	M15523 (83-394)	Contact Tips .030"
		KH712, KP11-35	M15524 (83-395)	Contact Tips .035"
5		246-534-000	B7074370	Switch
6		S26399-25	B7043370	Handgrip, Right
7		S26399-26	B7044370	Quick Coupling
8		S26399-27	B7046370	Torch Hook
9		S26399-28	B7047370	Gas Hose
10		S26399-32	B7075370	Cable Liner
11		S26399-29	B7048370	Torch Sheath
12		238-595-000	M15218 (83-248)	Complete Torch (new style with lug)
		334-597-000	M15184 (83-637)	Complete Torch (old style with plug)
13		S26399-1	246945	Knob
14		S26399-22	B7033370	Knob
15		312-516-666	260470	Frame
16		S26399-30	B7070370	Switch
17		S26399-10	251067	Terminal Board
18		S26400-1	246948	Side Panel Latch
19		S26399-12	260531	Hinged Side Panel
20		See 52	B7001370	Cable holder
21		See 52	B7002370	Bearing
22		See 52	B7003370	Roller pin
23		See 52	B7004370	Roller presser pin
24		See 52	B7005370	Spring rest ring
25		See 52	B7006370	Spring
26		See 52	B7007370	Knob

Item	Lincoln Stock #	Customer #	Description
27	See 52	B7008370	Roller holder arm
28	See 52	B7009370	Drive motor support
29	S26399-16	260546	Front Panel
30	S26399-31	B7071370	Drive Roller
31	S26399-8	251030	Washer / Ring
32	S26399-9	251031	Spring
33	S26399-7	251027	Coil Support Spacer
34	S26399-6	251022	Coil Support
35	S26399-2	246958	Hinge
36	512-265-666	260467	Rubber Matt
37	312-515-666	250975	Handle
38	S26399-13	260533	Cover
39	S26399-14	260534	Center Divider
40	S26399-17	260548	Undercarriage
41	216-110-666	260453	Fan Motor
42	S26399-19	B7023370	Input Power Cord
43	512-265-666	260461	Rubber Mat
44	312-515-666	B7018380	Strain Relief
45	S26399-5	246996	Rectifier
46	216-114-000	B7062370	Wire Speed Motor
47	S26399-4	246994	Switch
48	880-590-000	B7066370	Circuit Board
49	S26399-11	260454	Reactor Coil
50	S26399-21	B7032380	Thermostat
51	S26399-20	B7028370	Thermostat Support
52	334-635-000	246229	Drive Base Assy. (includes 20-28)
53	S26399-15	260545	Contactora Bracket
54	246-519-666	B7053370	Contactora
55	S26399-3	246983	Ground Cable Assy
56	334-460-001	--	Gas Regulator

1/15/2007

Model	Primary Input	Input Plug	Duty Cycle at Rated Output
M12183	120V, 20 amp	15A	20%

Rated Output	Voltage Settings	Agency Listing	Max Output
85 amps	7	CSA	130 amps

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P1 White (closest to knob)

P2 Black

PE

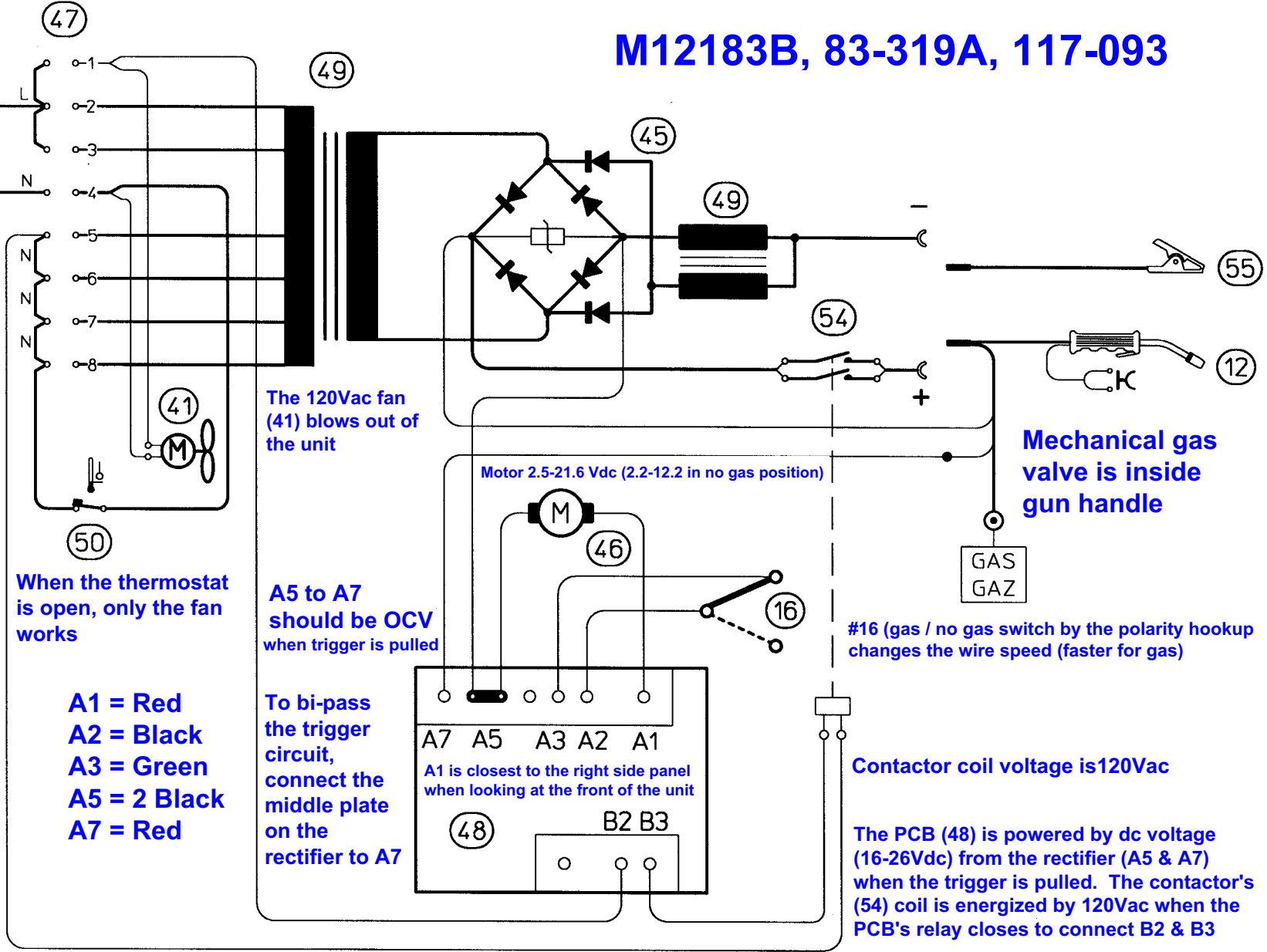
Input and fan motor voltage is 120Vac

Open Circuit Volts

- 1 - 16.9 Vdc
- 2 - 18.3Vdc
- 3 - 19.7Vdc
- 4 - 20.3Vdc
- 5 - 22.0dc
- 6 - 23.9Vdc
- 7 - 25.9Vdc

Switch in Gas position and wire speed on Maximum

	L/1	L/2	L/3	N/4	N/5	N/6	N/7	N/8
pos.0								
pos.1	●	●			●			●
pos.2	●	●		●			●	
pos.3	●	●				●		
pos.4	●		●	●				●
pos.5	●		●				●	
pos.6	●		●	●		●		
pos.7	●		●	●	●			



When the thermostat is open, only the fan works

The 120Vac fan (41) blows out of the unit

A5 to A7 should be OCV when trigger is pulled

To bi-pass the trigger circuit, connect the middle plate on the rectifier to A7

- A1 = Red
- A2 = Black
- A3 = Green
- A5 = 2 Black
- A7 = Red

Motor 2.5-21.6 Vdc (2.2-12.2 in no gas position)

Mechanical gas valve is inside gun handle

#16 (gas / no gas switch by the polarity hookup changes the wire speed (faster for gas)

Contactor coil voltage is 120Vac

The PCB (48) is powered by dc voltage (16-26Vdc) from the rectifier (A5 & A7) when the trigger is pulled. The contactor's (54) coil is energized by 120Vac when the PCB's relay closes to connect B2 & B3

117-093-000, M12183 Kit



MARQUETTE[®]

M12183

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WIRE SPEED

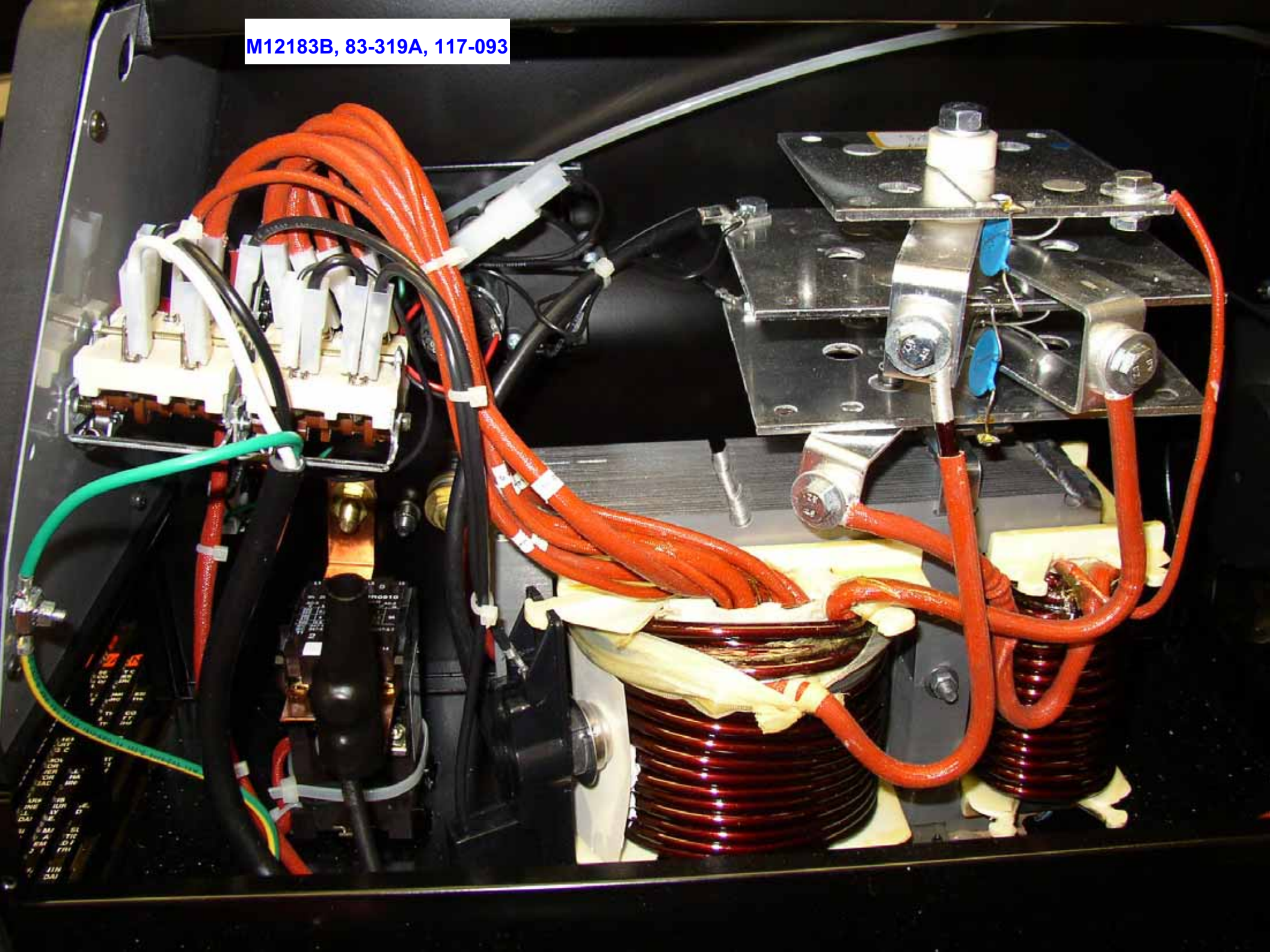


HEAT

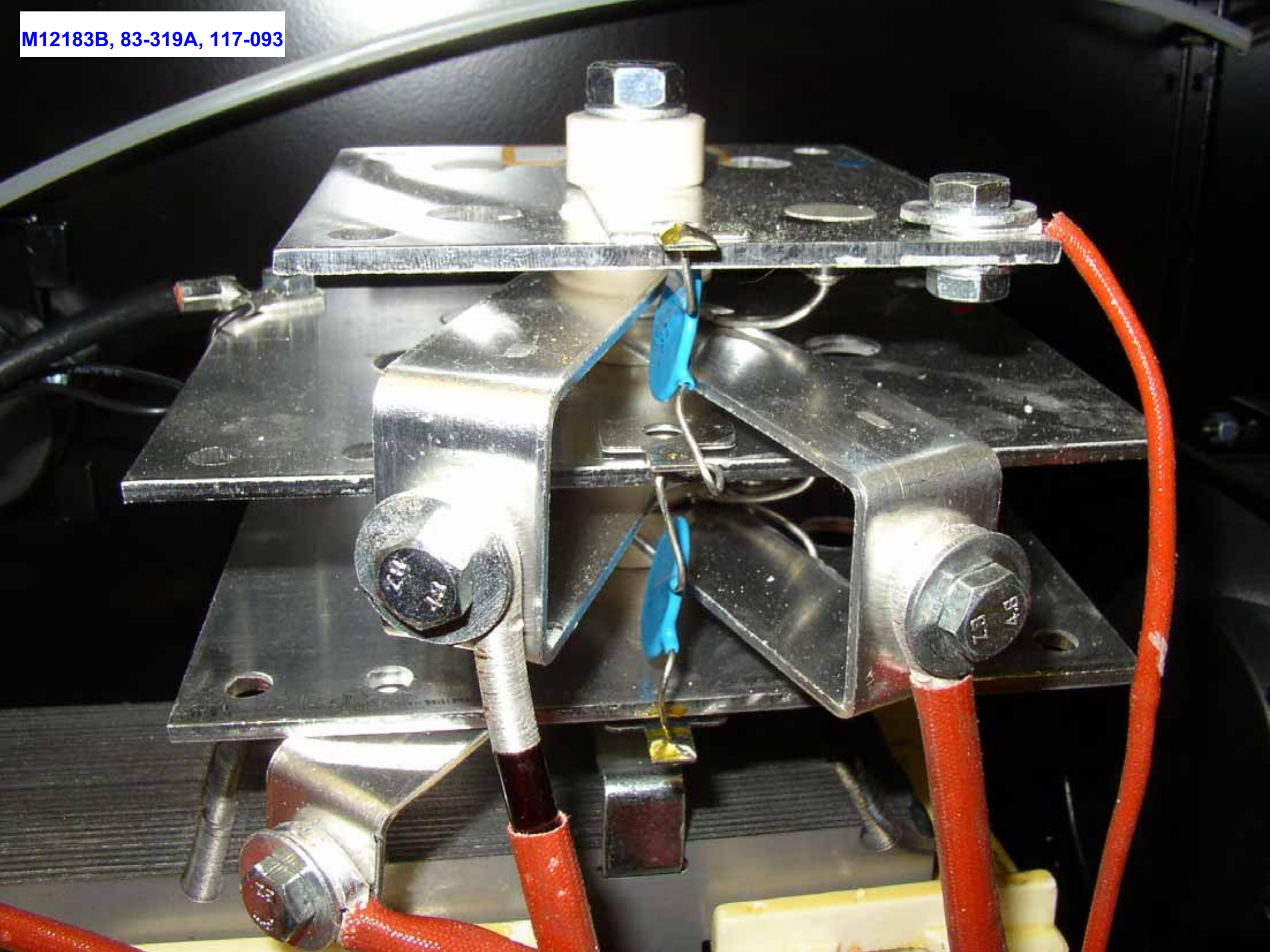
GAS

GAS WIRE WELDER

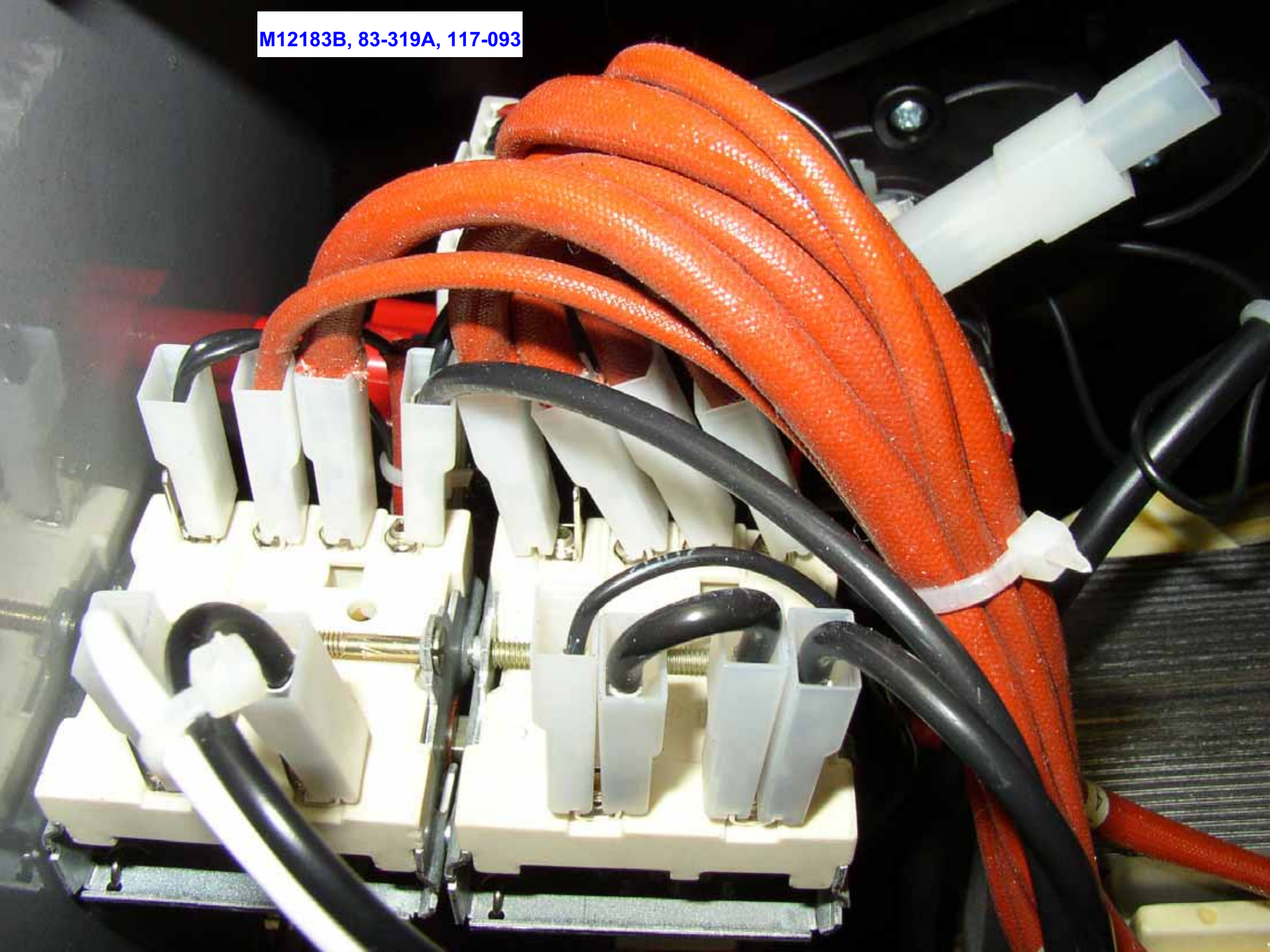
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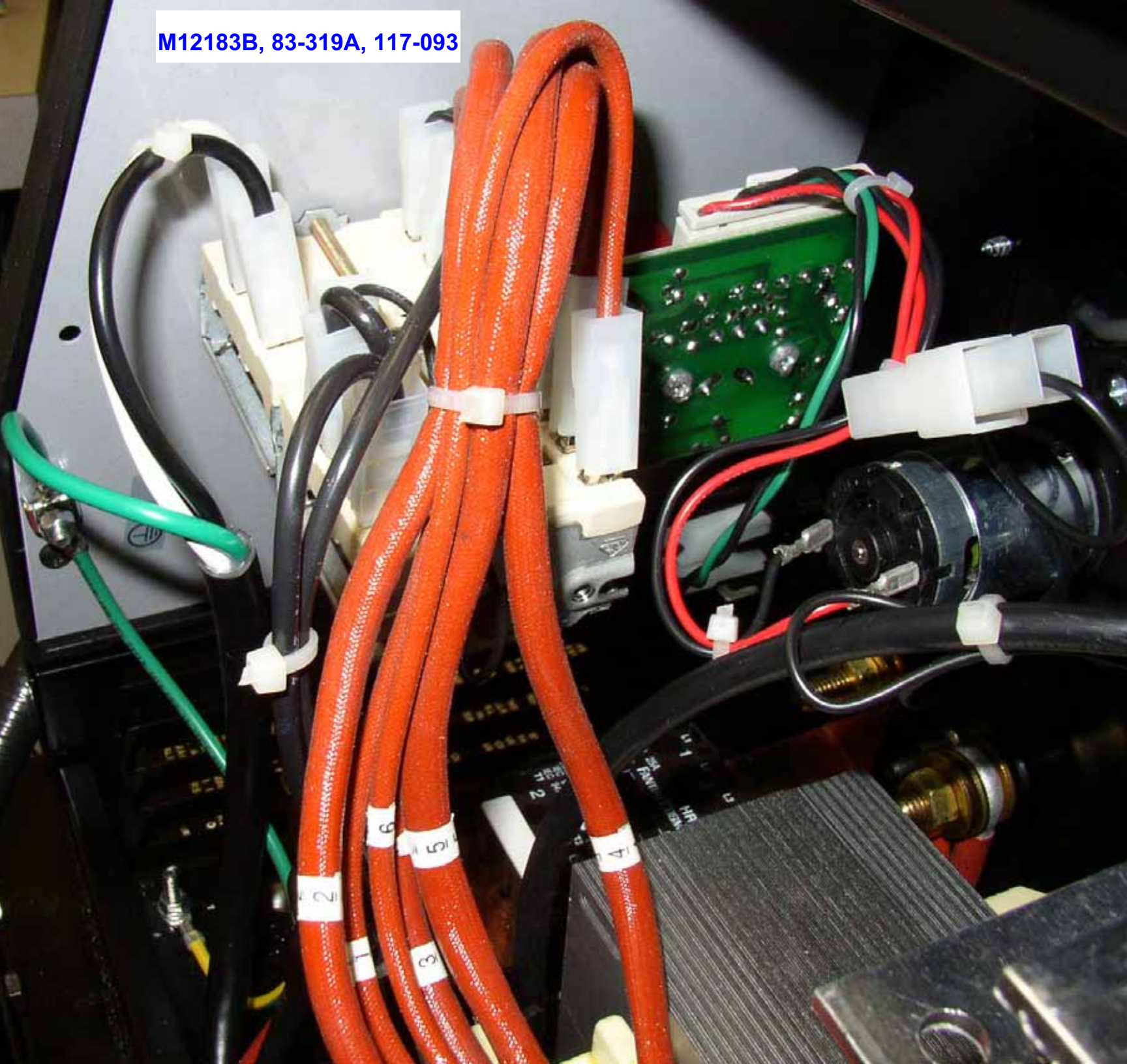
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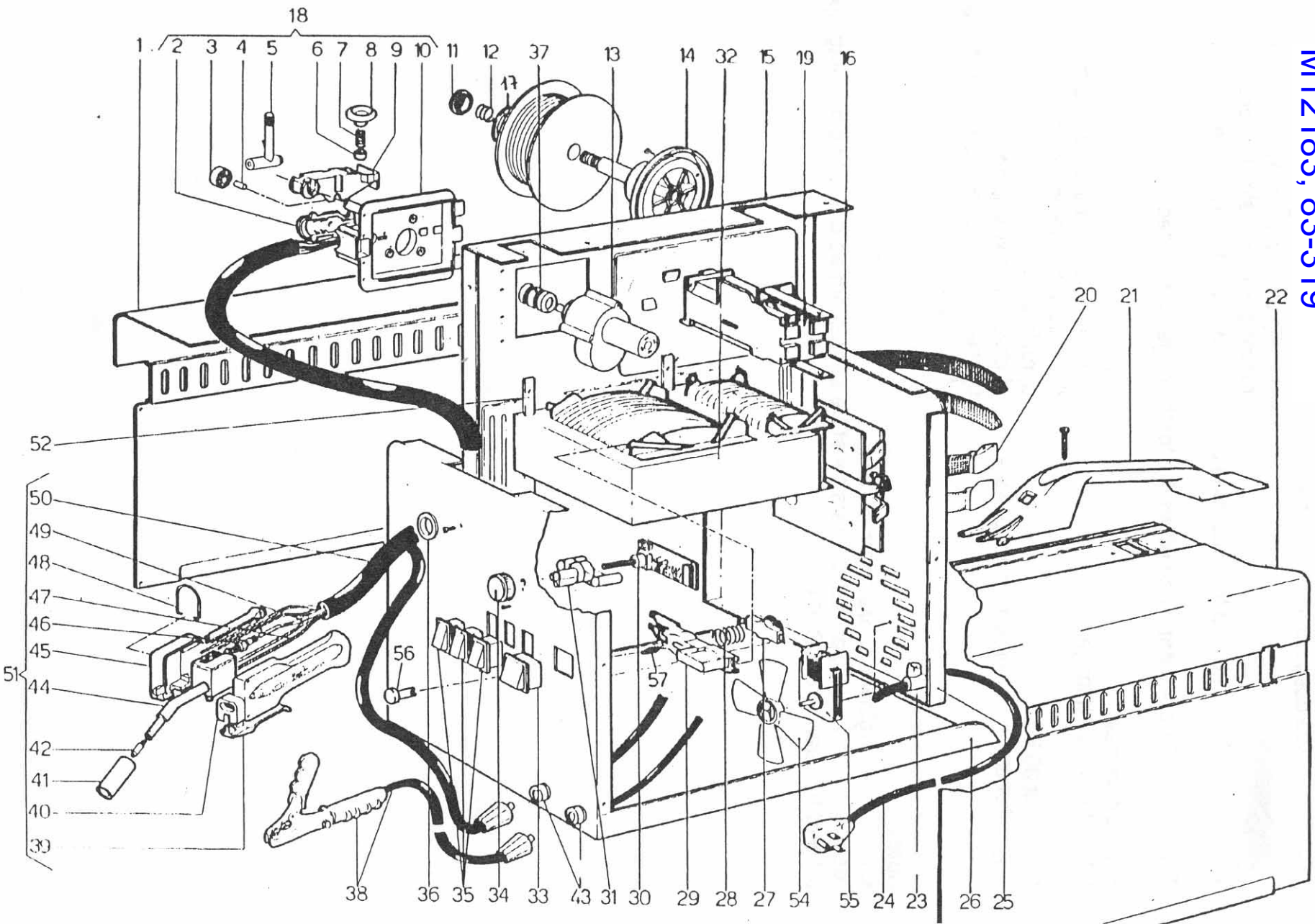


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pos	DESCRIPTION
1	HINGED SIDE PANEL
2	CABLE HOLDER WORK
3	BEARING
4	PIN
5	DRIVE ROLL PIN
6	SPRING SUPPORT
7	SPRING
8	KNOB
9	ROLLER HOLDER ARM
10	WIRE FEED MOTOR SUPPORT
11	RING
12	SPRING
13	WIRE FEED MOTOR
14	COIL SUPPORT
15	INTERMEDIATE PLANE
16	RECTIFIER
17	COIL OUTER SUPPORT
18	WIRE FEED KIT
19	CONTACTOR
20	BELT
21	HANDLE
22	FIXED SIDE PANEL
23	CABLE HOLDER WORK
24	INPUT POWER CABLE
25	BACK PANEL

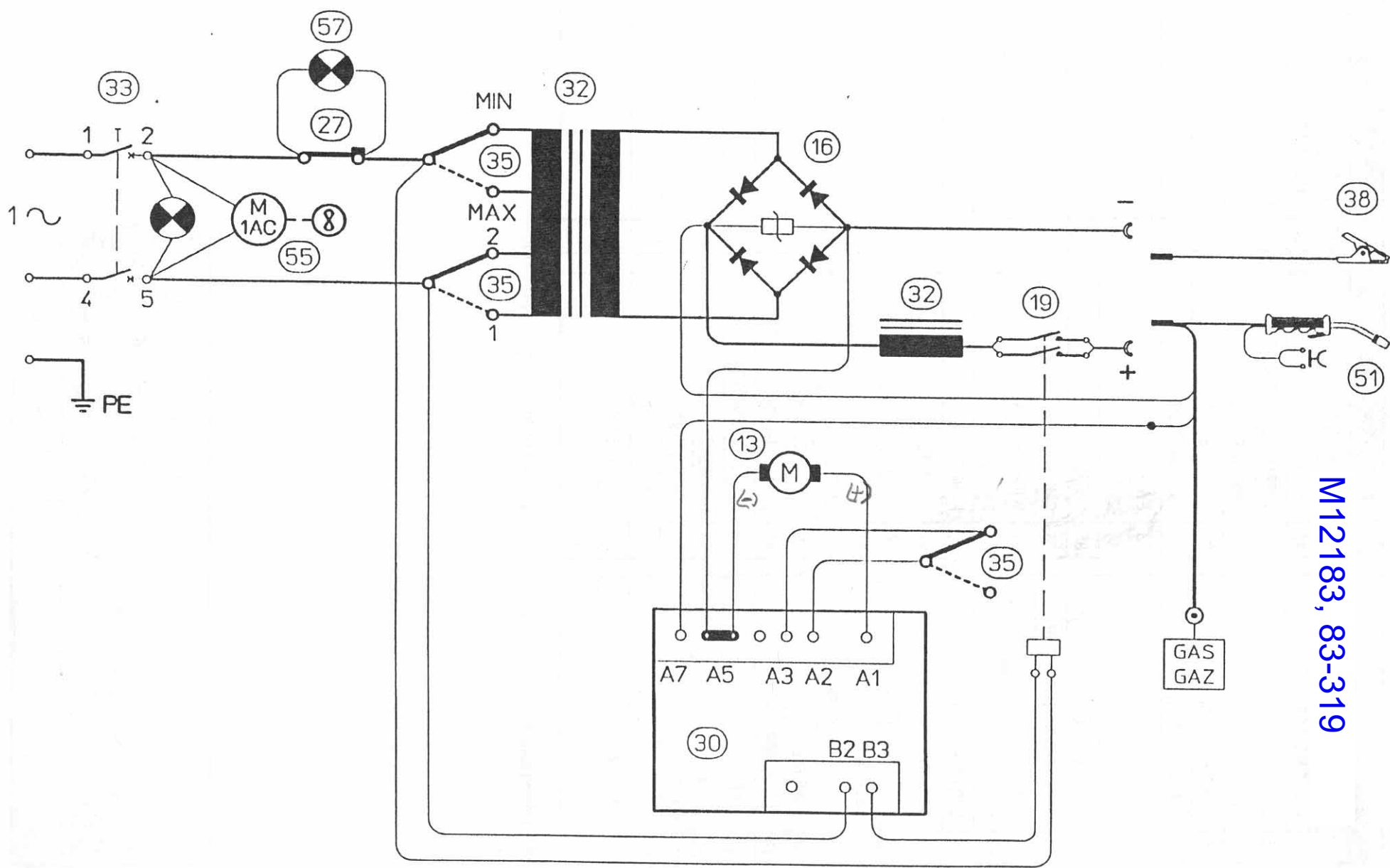
pos	DESCRIPTION
26	UNDERCARRIAGE
28	SPRING
29	THERMOSTAT SUPPORT
30	CIRCUIT BOARD
31	CIRCUIT BOARD SUPPORT
32	TRANSFORMER
33	SWITCH
34	KNOB
35	SWITCH
36	CABLE OUTLET
37	WIRE FEED ROLLER
38	EARTH CABLE
40	HANDGRIP
41	GAS NOZZLE
42	CONTACT TIP
44	SWITCH
45	HANDGRIP
46	QUICK COUPLING
47	SPIRAL SHEATH
48	THORCH CONNECTOR
49	GAS HOSE
50	TORCH SHEATH
51	COMPLETE TORCHE
52	LOCKING DEVICE
54	FAN

pos	DESCRIPTION
55	MOTOR
56	LAMP HOLDER
57	LIGHT

When ordering spare parts please always state item No., spare part ref. No., quantity and purchase date.

M12183, 83-319

	WIRING DIAGRAM COLOUR CODE
A	BLACK
B	RED
C	GREY
D	WHITE
E	GREEN
F	PURPLE
G	YELLOW
H	BLUE
K	BROWN
J	ORANGE
I	PINK
L	PINK-BLACK
M	GREY-PURPLE
N	WHITE-PURPLE
O	WHITE-BLACK
P	GREY-BLUE
Q	WHITE-RED
R	GREY-RED
S	WHITE-BLUE
T	BLACK-BLUE
U	YELLOW-GREEN



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