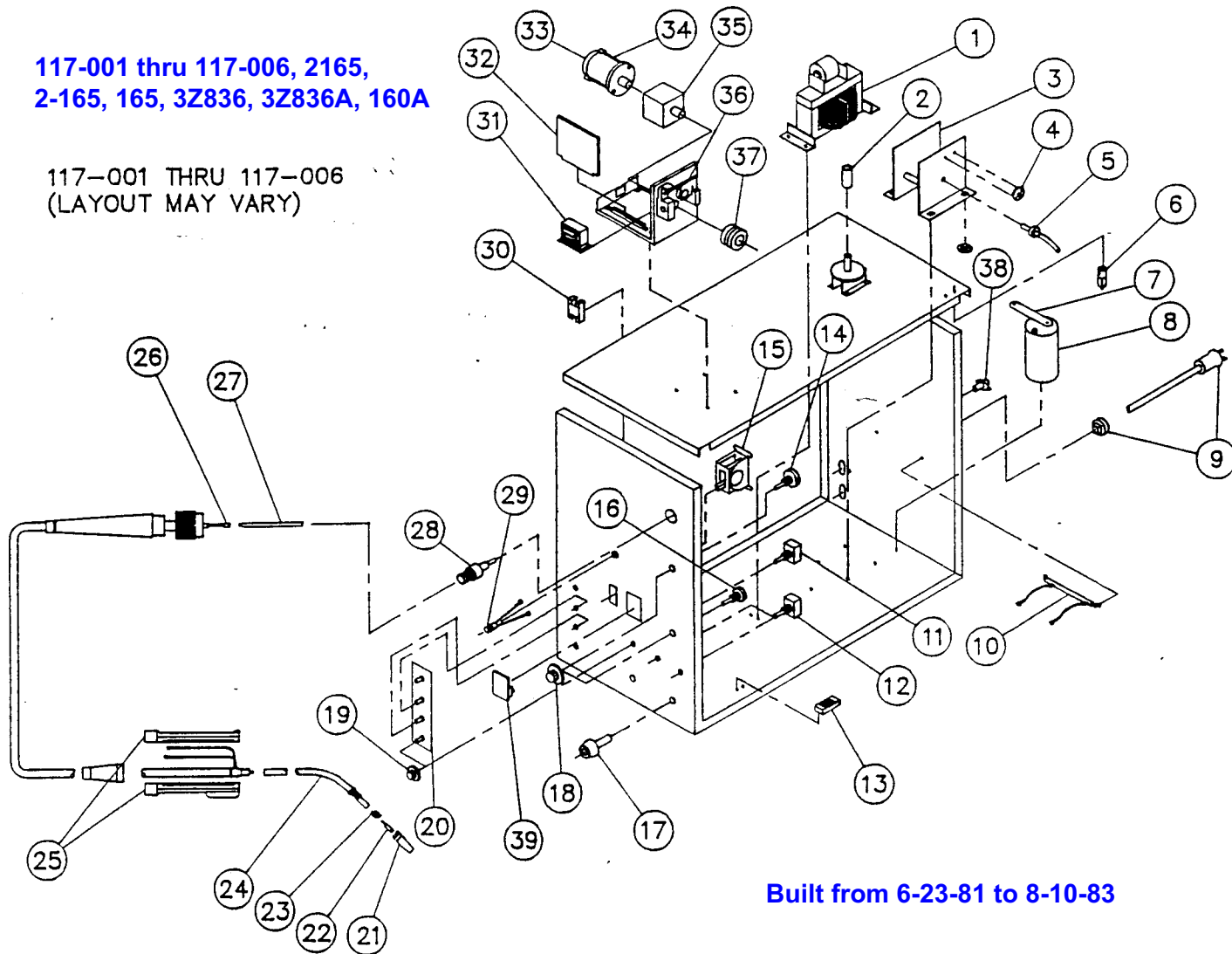


117-001 thru 117-006, 2165,
2-165, 165, 3Z836, 3Z836A, 160A

117-001 THRU 117-006
(LAYOUT MAY VARY)



Built from 6-23-81 to 8-10-83

117-001 thru 117-006, 2165, 2-165, 165, All Star, Henning Hansen 160a

Item	Lincoln #	Customer #	Description
1	NLA	860-507-888	Weld Transformer
2	312-110-666	312-087-666	Spindle adapter
3	NLA	860-506-666	Heat sink Assy.
4	216-053-666	216-053-000	Thermostat
5	214-004-666	214-004-666	Diode
6	246-086-666	246-086-666	Gas solenoid
7	Use 5", #3 cable w/ 9/32" Lugs	410-190-666	Buss bar
8	213-018-666	213-018-666	Capacitor
9		248-164-666	Powercord, 16/3, 30'
10		860-523-000	Resistor assy., 25Ω, 50 watt
11		216-057-666	Rotary switch, 2 pos., burnback
		216-051-666	Toggle for 117-003,004 only
12		216-058-666	Momentary switch, purge & inch
13	NLA	239-094-666	Terminal block
14		246-052-666	Heat switch (9 position)
15	216-042-666	216-042-666	Power switch
16		246-093-000	Wire speed pot., 5K, 0.5 Watt w / Switch
17	312-045-666	312-045-666	Receptacle assembly
18	246-041-666	246-095-000	Knob, Heat & Wire Control, 1.5"
19	246-041-666 will replace	246-094-000	Knob, 1", Spot Stitch & Burnback
20	860-489-666	860-489-666	Spot/Stitch circuit board
21	334-164-400	4306, M15520	Nozzle, tapered for steel
22	KP11-25	43090	0.025 Contact tips
	KP11-30	43100	0.030 Contact tips
	KP11-35	43110	0.035 Contact tips
23		334-172-000, B7124370	Spring (Included with 334-632-000 Diffuser)

Built from 6-1-81 (W652492) to 8-10-83 (B346074) - 18,406

Model	Primary Input	Input Plug	Duty Cycle at Rated Output
117-003	230V, 20A	25A	20%

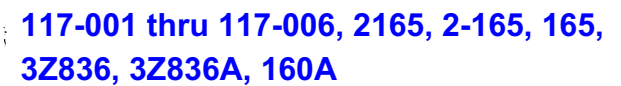
Item	Lincoln #	Customer #	Description
24	334-628-000	334-174-666	Gooseneck w/ Diffuser & Spring
	334-632-000	246311	Diffuser with spring (not shown)
25		334-178-666	Handle assembly
26	411-121-666	4315	Steel liner
	411-123-666	4317	Teflon liner
27		410-248-666	Guide tube for steel liner
28	NLA	860-494-666	Gun connector
29		245-078-666	Indicator light, 230Vac, amber
30	216-055-666	216-055-666	Triac relay
31		860-503-888	Control Transformer, 230Vac - 24Vac
32	860-504-666	860-504-666	Main circuit board
33	NLA	216-049-001	Drive motor end cap
34	NLA	216-049-666	Drive motor
35	NLA	216-050-666	Gear box
36		860-528-666	Tensioner
37		860-571-500 (4326)	Drive wheel for 117-002 - 117-006
	NLA	4321	Orange Roller
38		246-116-000	Fuse holder
		245-060-000	Fuse only (BAN30 or BLN30)
39		247-063-000	Wire speed meter

Not Shown

40	NLA	860-492-666	Wiring inside drive box
41	NLA	410-347-020	Right side panel
	NLA	410-348-020	Left side panel
42	NLA	410-230-100	Hood
43		334-644-000, 238-123-000	Complete Gun Assembly

8/18/2010

Rated Output	Voltage Settings	Agency Listing	Max Output
100 amps	9	None	130 amps



Built from 6-23-81 to 8-10-83

117-001 to 117-006 Schematic Legend

Symbol Description

C1	100µf, 25v, Electrolytic Capacitor
C2	0.01µf, 50v, Disc Capacitor
C3	10µf, 25v, Electrolytic Capacitor
C4	1,000µf, 50v, Electrolytic Capacitor
C5	0.1µf, 50v, Disc Capacitor
C6	90,000µf, 45v, Electrolytic Capacitor
C7	45,000µf, 45v, Electrolytic Capacitor
CR1	1N4006 Diode
CR2	1N4006 Diode
CR3	1N4006 Diode
CR4	1N4006 Diode
CR5	1N4006 Diode
CR6	1N4006 Diode
CR7	1N4006 Diode
CR8	1N4006 Diode
CR9	1N4006 Diode
CR10	1N4006 Diode
CR12	IR150K30, 150 Amp, 300 PIV, Diode
CR13	IR150K30, 150 Amp, 300 PIV, Diode
CR14	IR3054, Diode
DS1	220v neon light
F1	One shot, 240 degrees celsius open
K1	Gas Solenoid, 24vdc coil
Q1	2N2222 Transistor
Q2	2N5193 Transistor
Q3	2N5193 Transistor
Q5	2N3055 Transistor
Q6	Motorola TIP 127 Transistor
R1	Potentiometer, 5KΩ, 1 watt
R2	Resistor, 1.2KΩ, 1/2 watt
R3	Resistor, 470Ω, 1/2 watt

Symbol Description

R4	Resistor, 1KΩ, 1/2 watt
R5	Resistor, 2.2KΩ, 1/2 watt
R6	Resistor, 4.7Ω, 1/2 watt
R7	Resistor, 100Ω, 1/2 watt
R8	Resistor, 470Ω, 1/2 watt
R9	Resistor, 1KΩ, 1/2 watt
R10	Resistor, 560Ω, 1/2 watt
R11	Resistor, 47Ω, 1/2 watt
R12	Resistor, 100Ω, 1/2 watt
R14	Resistor, 47Ω, 1/2 watt
R15	Resistor, 220Ω, 1/2 watt
R16	Resistor, 220Ω, 1/2 watt
R17	Resistor, 4.7KΩ, 1/2 watt
R18	Resistor, 680Ω, 1/2 watt
R19	Resistor, 25Ω, 50 watt
R20	Resistor, 4.7KΩ, 1/2 watt
S1	SPDT, Burnback Control
S2	SPST, Gun Trigger
S3	SPST, Momentary Gas Purge
S4	SPST, Momentary Inch
S5	DPST, Main Power Switch
S6	9 Pole Rotary Switch
S7	Thermal Breaker, 175 degrees Celsius open
SSR1	Triac Relay, D2440, 40 amp
T1	Control transformer, 230Vac to 24vac, 6 amp
T2	Weld transformer
T3	Reactor coil
U1	LM723CN
U2	LM317T
U3	LM317T