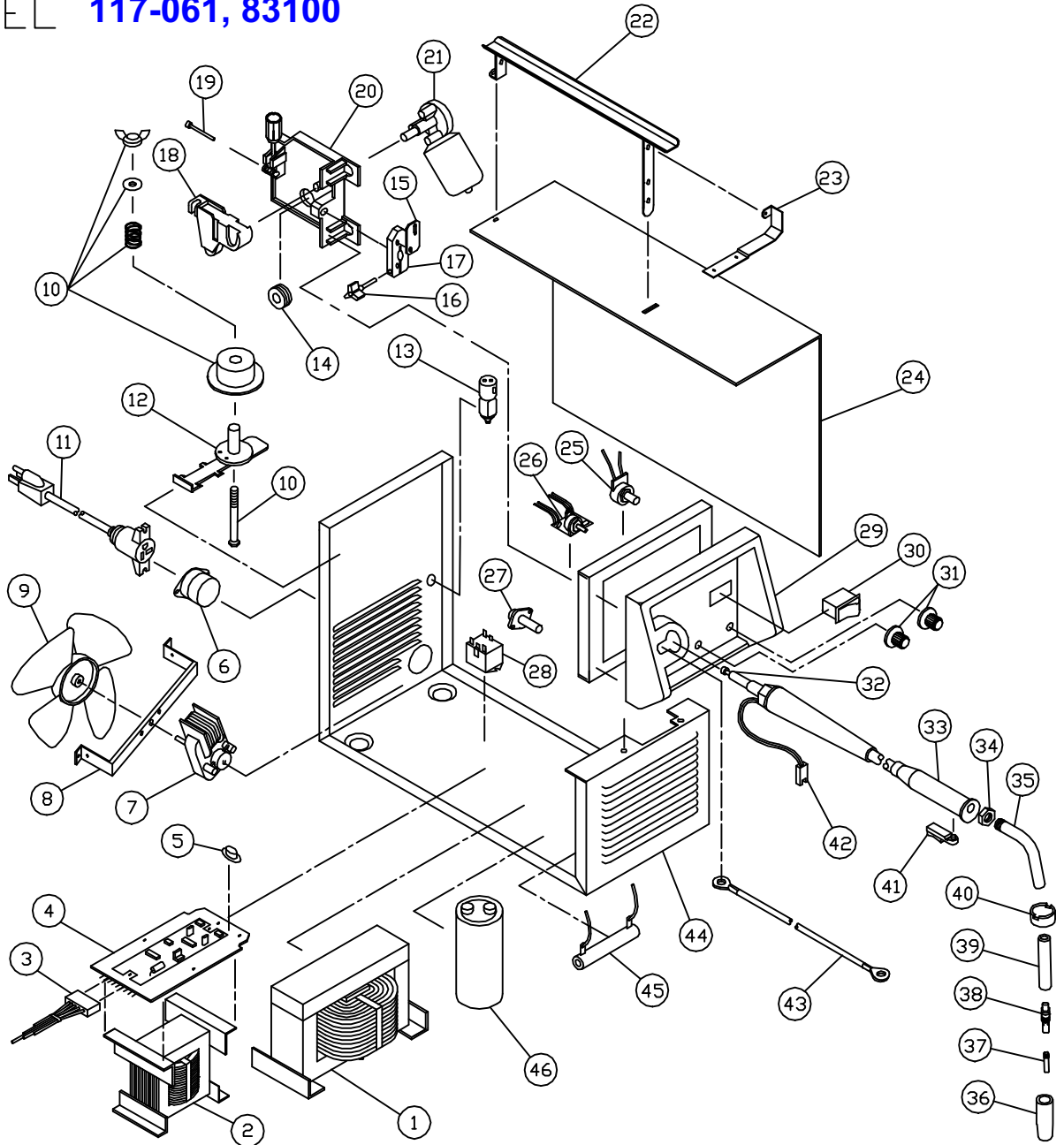


# REPLACEMENT PARTS LIST

## 100 AMP WIRE FEED WELDER

### MODEL **117-061, 83100**



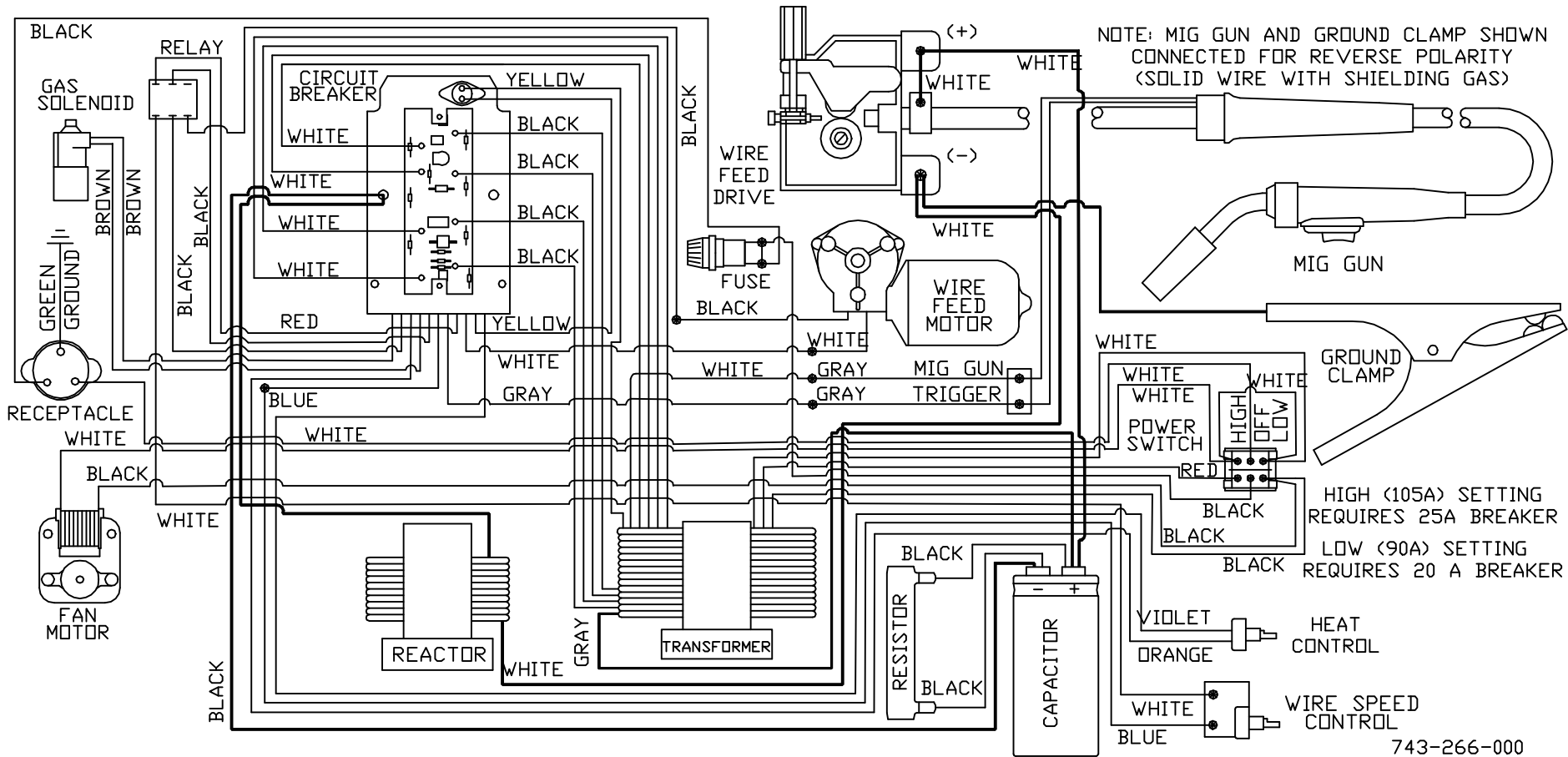
# 117-061 (83100), 100 Amp Mig

Item	Lincoln Stock #	Customer #	Description
1	Repair	<b>880-188-888</b>	Main weld transformer
2	NLA	880-215-888	Reactor Coil w/ thermostat
3		880-225-666	Wire harness
4	880-217-666	880-217-666	Circuit board
5	216-053-666	216-053-666	Thermostat
6	S18414-1	239-159-666	Power receptacle
7	216-087-666	216-087-666	Fan motor
8	NLA	412-375-000	Fan motor bracket
9		<b>316-009-000</b>	Fan blade
10	131-419-000	131-213-000	Tension hardware
11	S18475	248-226-000, <b>248-227-100</b> <b>(4040)</b>	Power cord
12	312-076-666	312-076-666	Spindle
13	246-086-666	246-212-666	Gas solenoid
14	310-122-500	4323	Drive roller, 0.024 / 0.030 / 0.035
15		<b>410-464-666</b>	Copper jumper
16		<b>246-326-000</b>	Tension arm only
17	412-465-666	412-465-666	Mig Gun connector
18	Included in #20	880-111-666, <b>312-107-000</b>	Tension arm only
19	Included in #20	239-123-666, <b>239-208-000</b>	Inlet guide tube
20	880-130-666	880-130-666	Drive base with arm
21	216-089-666	216-089-666	Drive motor
22	NLA	880-012-010	Handle assembly
23	NLA	412-278-010	Hood hinge
24	NLA	410-568-020	Right side panel
25		<b>245-108-666</b>	Heat potentiometer
26	880-219-666	880-219-666	Wire speed pcb
27a		<b>246-116-666</b>	Fuse holder cap
27b		<b>245-060-666</b>	Fuse only, BAN30 or BLN30

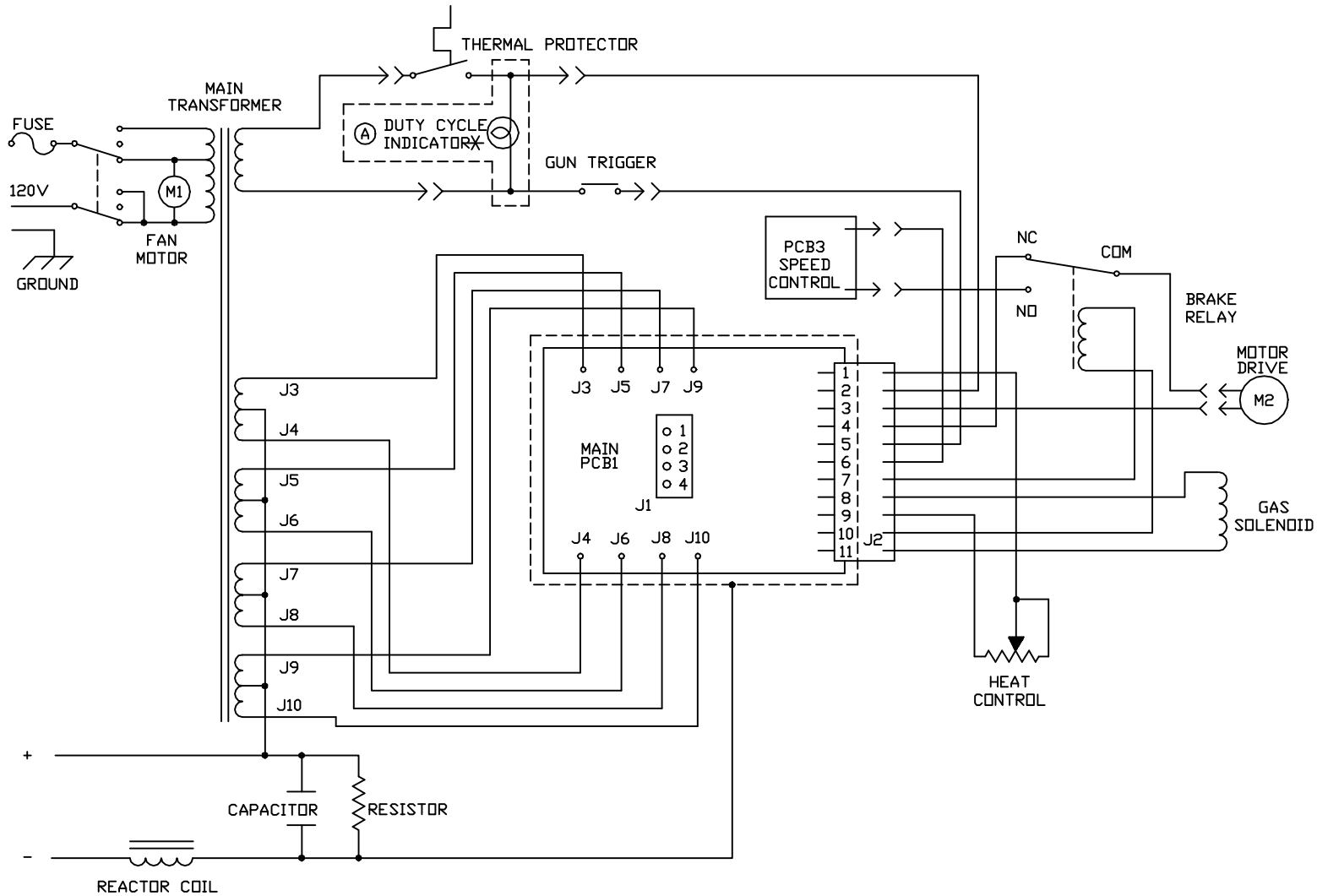
Item	Lincoln Stock #	Customer #	Description
28	246-258-666	246-258-666	Relay, 24Vdc coil
29	NLA	743-267-666	Mig nose w/label
30	246-259-666	246-259-666	90 / 110 Amp Rocker Switch
31	246-041-666	246-041-666	Knob
32	<b>KP45-40-15</b>	<b>4331, KP1937-1</b>	<b>Steel liner</b>
	<b>KP1959-1</b>	<b>4325</b>	<b>Teflon liner</b>
33	<b>238-155-000</b>	<b>238-155-000</b>	<b>10' Mig Gun</b>
34		334-220-000	Nut
35	334-227-000	334-227-000	Conductor tube
36	KP21T-62	43300, 334-210-300, KP1942-3	Aluminum welding nozzle
	KP21-62-FAS	43290, 334-211-300, KP1956-1, M15577	Spot welding nozzle
37	KP11-25, KH710	43090, 334-159-300, KP2039-1B1, M15522	0.025 Contact Tips
	KP11-30, KH711	43100, 334-160-300, KP2039-2B1, M15523	0.030 Contact Tips
	KP11-35, KH712	43110, 334-161-300, KP2039-3B1, M15524	0.035 Contact Tips
38	334-228-000	334-228-000	Gas diffuser
39	Included with #35	<b>334-217-000</b>	Conductor tube insulation
40		<b>334-219-000</b>	Handle cap
41	334-221-000	334-221-000	Trigger
42		<b>860-744-000</b>	Trigger harness
43	S11609-18	<b>238-216-666</b>	Ground cable only, 9' w / lugs
	M12033	239-010-102	Ground clamp only(not shown)
44	NLA	410-639-010	Mig base
45		<b>860-523-666</b>	Bleeder resistor
46	S13490-109	213-035-666	Capacitor
<b>Not Shown</b>			
47	334-303-001	334-286-666	Gas regulator
48	059-245-666		Gas hose

Model	Primary Input	Input Plug	Duty Cycle at Rated Output
117-061	120V, 20 amp	15A	20%

Rated Output	Voltage Settings	Agency Listing	Max Output
90 amps	Infinite	CSA	100 amps



Models 117-052, 117-053, 117-058, 117-061, 117-064

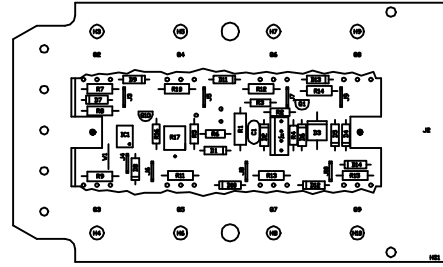
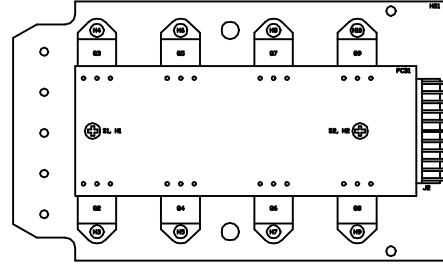
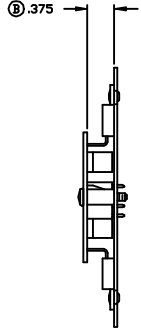


610-120-000

Models 117-052, 117-053, 117-058\*, 117-061, 117-064

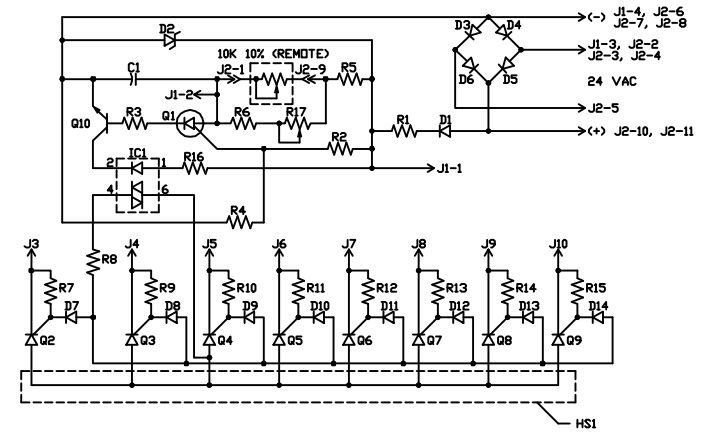
(A) \* DUTY CYCLE INDICATOR LIGHT IS ONLY ON INDICATED MODELS.

©1990. THIS DOCUMENT AND ITS CONTENTS ARE PROPRIETARY TO CENTURY MFG CO. ANY REPRODUCTION, DISSEMINATION OR USE OF THIS DOCUMENT IS EXPRESSLY PROHIBITED EXCEPT AS OTHERWISE AGREED TO IN WRITING.		(B) EN 11848	5-21-91	GPG
		(A) EN 11094	8-24-90	KIM
SYM	REVISION	DATE	BY	
DO NOT SCALE UNLESS SPECIFIED DIMENSIONS ARE IN INCHES		CENTURY MFG CO		9231 PENN AVE SD MPLS, MN 55431
TOLERANCES UNLESS SPECIFIED		DWN BY LRB	DATE 4-3-90	MAT'L
DECIMALS: ±.015		DFT CHK		
FRACTIONS: ±1/64		ENG CHK		
ANGLES: ±0.5°		ENG APPV JCW	5-7-90	
PREVIOUSLY RELEASED AS	APPV	SCALE NONE		RELEASE NO 10848
P. -	REV. -	DATE ISSUED	DEPT CODE 74	
TITLE SCHEMATIC			DWG NO	610-120-000



NOTES:

1. SOLDERING AND GENERAL WORKMANSHIP TO COMPLY WITH IPC-CM-770B.
2. TRIM EXCESS COMPONENT LEAD LENGTH TO .125" MAX.
3. CONFORMAL COAT PER QC PROCEDURE #QCP 98050. DO NOT CONFORMAL COAT POTENTIOMETER (R17).  
MATERIAL: DDW CORNING 1-2577 .002 - .006 THICK  
HUMISEAL 1A27 .002 - .004 THICK
4. KNOB OF POTENTIOMETER (R17) TO BE SEALED TO PREVENT ROTATION AFTER CALIBRATION OF CIRCUIT BOARD.
5. ENTIRE CONTACT SURFACE OF SCR'S (Q2 THRU Q9) TO HAVE THERMAL GREASE, GE #G64L OR EQUAL, APPLIED PRIOR TO RIVETING TO HEATSINK.
- 6.
7. BOARD TO BE SHIPPED IN BULK PACKING TO PROTECT FROM DAMAGE.



SCHMATIC DIAGRAM

J10	TERMINAL, .250 x .031 TAB, AMP #62650-1, AUTOSPlice 47-13330-8	ⓑ
J9	TERMINAL, .250 x .031 TAB, AMP #62650-1, AUTOSPlice 47-13330-8	ⓑ
J8	TERMINAL, .250 x .031 TAB, AMP #62650-1, AUTOSPlice 47-13330-8	ⓑ
J7	TERMINAL, .250 x .031 TAB, AMP #62650-1, AUTOSPlice 47-13330-8	ⓑ
J6	TERMINAL, .250 x .031 TAB, AMP #62650-1, AUTOSPlice 47-13330-8	ⓑ
J5	TERMINAL, .250 x .031 TAB, AMP #62650-1, AUTOSPlice 47-13330-8	ⓑ
J4	TERMINAL, .250 x .031 TAB, AMP #62650-1, AUTOSPlice 47-13330-8	ⓑ
J3	TERMINAL, .250 x .031 TAB, AMP #62650-1, AUTOSPlice 47-13330-8	ⓑ
J2	CONNECTOR, 11-PIN, AMP #1-640389-1	
J1	CONNECTOR, 4-PIN, AMP #640388-4	
IC1	INTEGRATED CIRCUIT MDC 3021	
HS1	HEATSINK (CENTURY #412-374-001)	Ⓐ
H10	RIVET, SEMITUBULAR, .120 DIA x .218 L (CENTURY #077-056-000)	
H9	RIVET, SEMITUBULAR, .120 DIA x .218 L (CENTURY #077-056-000)	
H8	RIVET, SEMITUBULAR, .120 DIA x .218 L (CENTURY #077-056-000)	
H7	RIVET, SEMITUBULAR, .120 DIA x .218 L (CENTURY #077-056-000)	
H6	RIVET, SEMITUBULAR, .120 DIA x .218 L (CENTURY #077-056-000)	
H5	RIVET, SEMITUBULAR, .120 DIA x .218 L (CENTURY #077-056-000)	
H4	RIVET, SEMITUBULAR, .120 DIA x .218 L (CENTURY #077-056-000)	
H3	RIVET, SEMITUBULAR, .120 DIA x .218 L (CENTURY #077-056-000)	
H2	SPACER O.D. 1/4", LENGTH .375 CLEARANCE #6 SCREW	ⓑ
H1	SPACER O.D. 1/4", LENGTH .375 CLEARANCE #6 SCREW	ⓑ
D14	DIPDE, IN4002 THRU IN4006	
D13	DIPDE, IN4002 THRU IN4006	
D12	DIPDE, IN4002 THRU IN4006	
D11	DIPDE, IN4002 THRU IN4006	
D10	DIPDE, IN4002 THRU IN4006	
D9	DIPDE, IN4002 THRU IN4006	
D8	DIPDE, IN4002 THRU IN4006	
D7	DIPDE, IN4002 THRU IN4006	
D6	DIPDE, IN4002 THRU IN4006	
D5	DIPDE, IN4002 THRU IN4006	
D4	DIPDE, IN4002 THRU IN4006	
D3	DIPDE, 6A MR754 DR 6A4	
D2	DIPDE, ZENER 5.1V IN4733A	
D1	DIPDE, IN4002 THRU IN4006	
C1	CAPACITOR, .47UF 50V 5% PANASONIC V-SERIES	
SYM	DESCRIPTION	

W1	WIRE, 22GA TINNED COPPER CONDUCTOR	
S2	SCREW #6-32 x 11/16" P.P.H. EXTENDED STAR WASHER	ⓑ
S1	SCREW #6-32 x 11/16" P.P.H. EXTENDED STAR WASHER	ⓑ
R17	POTENTIOMETER, CERMET 50K, SEALED	ⓑ
R16	RESISTOR, 100Ω 1/4W 5%	
R15	RESISTOR, 100Ω 1/2W 5%	
R14	RESISTOR, 100Ω 1/2W 5%	
R13	RESISTOR, 100Ω 1/2W 5%	
R12	RESISTOR, 100Ω 1/2W 5%	
R11	RESISTOR, 100Ω 1/2W 5%	
R10	RESISTOR, 100Ω 1/2W 5%	
R9	RESISTOR, 100Ω 1/2W 5%	
R8	RESISTOR, 100Ω 1/2W 5%	
R7	RESISTOR, 100Ω 1/2W 5%	
R6	RESISTOR, 13K 1/4W 5%	
R5	RESISTOR, 4.3K 1/4W 5%	
R4	RESISTOR, 15K 1/4W 1%	
R3	RESISTOR, 33Ω 1/4W 5%	
R2	RESISTOR, 10K 1/4W 1%	
R1	RESISTOR, 330Ω 1W 5%	
Q10	TRANSISTOR, 2N3904, MPS3904 DR PN3904	
Q9	SCR (CENTURY #244-073-000)	
Q8	SCR (CENTURY #244-073-000)	
Q7	SCR (CENTURY #244-073-000)	
Q6	SCR (CENTURY #244-073-000)	
Q5	SCR (CENTURY #244-073-000)	
Q4	SCR (CENTURY #244-073-000)	
Q3	SCR (CENTURY #244-073-000)	
Q2	SCR (CENTURY #244-073-000)	
Q1	TRANSISTOR, 2N6027	
PCB1	PRINTED CIRCUIT BOARD (CENTURY #510-095-000)	ⓑ
SYM	DESCRIPTION	

DO NOT SCALE UNLESS SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED DECIMALS - 0.015 FRACTIONS - 1/64 HOLE DIA - .0015 PREVIOUSLY RELEASED AS P. REV. SCALE 1:1		CENTURY MFG CO DATE 11-14-90 SFT CRK ENG CRK ENG APPV JCW 3-13-91 APPV SCALE 1:1 RELEASED 11438 DATE 11-14-90 P.74 REV NO		8801 PENN AVE SO MFLS, MN 55428 DATE BY 880-550-000	
(ⓑ) EN 11877 5-21-91 LRB (Ⓐ) EN 11694 3-22-91 CEA SYN REVISION DATE BY		CIRCUIT BOARD ASSEMBLY			