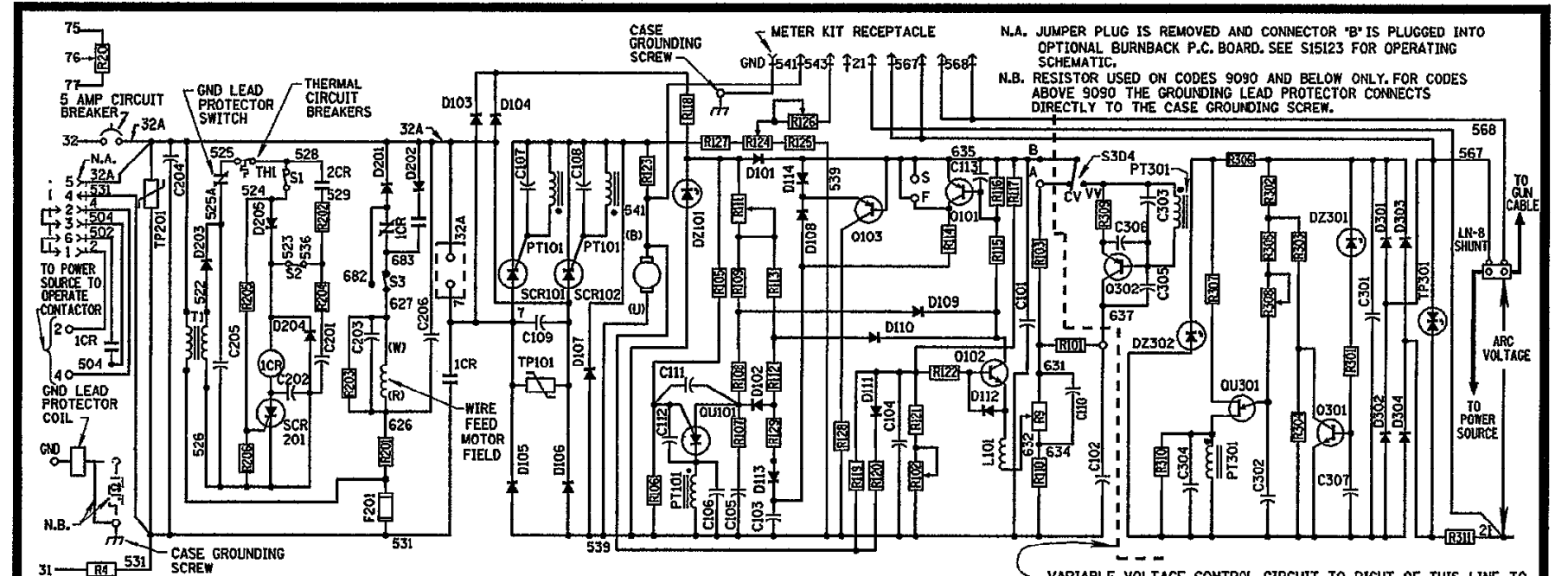


M14680

### LN-8N, -8S OPERATING SCHEMATIC



PRINT TO 8.50 X 11.00

<p><b>* CONTROL CIRCUIT (BOARD #1)</b></p> <p>C101 1MFD C102 2MFD C103 39MFD *10% C104 4.7MFD C105 .10MFD C106, C110, C111 .02 MFD C112, C113 .02 MFD C107, C108 .047MFD C109 .005MFD</p> <p>L101 5.6MH Q101 2N4125 Q102 2N4123 Q103 2N5815 Q104 2N6027 TP101 TRANSIENT PROTECTION SCR101 12A 400V SCR102 12A 400V PT101 1h1 PULSE TRANSFORMER</p> <p>D101 1A. D102 1A. D103 1A. D104 1A. D105 16A. D106 16A. D107 16A. D108 1A. D109 1A. D110 1A. D111 1A. D112 1A. D113 1A. D114 1A. DZ101 20V.</p> <p>R101 6.8KΩ R102 2KΩ TRIMMER R103 10KΩ R104 4.7KΩ R105 4.7KΩ R106 4.7KΩ R107 15Ω R108 33KΩ R109 33KΩ R110 750Ω R111 50KΩ TRIMMER R112 27KΩ R113 39KΩ R114 10KΩ R115 68KΩ</p> <p>R116 10KΩ R117 22KΩ R118 4.7KΩ 4W R119 27KΩ R120 15KΩ R121 1.5KΩ R122 10KΩ R123 .25Ω 7W R124 1KΩ TRIMMER R125 4.7KΩ 4W R126 1KΩ TRIMMER R127 150Ω R128 1KΩ R129 15KΩ</p>	<p><b>RELAY CIRCUIT (BOARD #2)</b></p> <p>C201 50MFD C202 .02MFD C203 50MFD C204 .005MFD C205 50MFD C206 .005MFD 1CR 3PDT 24V.D.C. D201 1A. D202 1A. D203 1A. D204 1A. D205 1A. D206 1A. R201 40Ω 12W R202 100Ω R203 100KΩ R204 2TΩ R205 4.7KΩ R206 1KΩ F201 1/2A 125V CR 250V SLOW BLOW FUSE SCR201 4A 400V TP201 TRANSIENT PROTECTION</p>	<p><b>▲ VARIABLE VOLTAGE CIRCUIT (BOARD #3)</b></p> <p>C301 2MFD C302 .10MFD C303 .01MFD C304 .047MFD C305 .01MFD C306, C307 .02MFD D301 1A. D302 2A. D303 3A. D304 4A. DZ301 62V DZ302 10V Q301 2N3393 Q302 2N4125</p> <p>R301 6.8KΩ R302 5.6KΩ (2%) R303 1KΩ (2%) R304 3.9KΩ (2%) R305 3.5KΩ R306 4.7KΩ 2W R307 100Ω R308 5KΩ TRIMMER R309 15Ω R310 47Ω R311 68Ω</p> <p>S304 POWER SOURCE SELECTOR SWITCH OU301 UJT</p> <p>PT301 1h1 PULSE TRANSFORMER TP301 TRANSIENT PROTECTION</p>	<p><b>COMPONENTS NOT ON P.C. BOARD</b></p> <p>R4 2Ω 50W R9 5KΩ 2W POT. R20 10KΩ 2W POT. T1 110-24V TRANSFORMER 2CR REED SWITCH (ACTUATED BY WELDING CURRENT) 4CR GROUNDING LEAD PROTECTOR S1 SPST GUN SWITCH S2 SPDT INTERLOCK SWITCH S3 SPDT DIRECTION SWITCH</p> <p>* FOR CONTROL P.C. BOARDS L5767-1 AND HIGHER, USE M16802 SCHEMATIC FOR COMPONENT VALUES AND CIRCUIT CONNECTIONS ▲ FOR VARIABLE VOLTAGE P.C. BOARD L5039-1 OR HIGHER, USE M16441 SCHEMATIC FOR COMPONENT VALUES AND CIRCUIT CONNECTIONS</p> <p>SINCE COMPONENTS OR CIRCUITRY ON A PRINTED CIRCUIT BOARD MAY CHANGE WITHOUT AFFECTING THE INTERCHANGEABILITY OF A COMPLETE BOARD, THIS DIAGRAM MAY NOT SHOW THE EXACT COMPONENTS OR CIRCUITRY OF CONTROLS HAVING A COMMON CODE NUMBER.</p>
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CLEVELAND, OHIO U.S.A.

12-3-92E

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<p>THIS SHEET CONTAINS PROPRIETARY INFORMATION OWNED BY THE LINCOLN ELECTRIC CO. AND IS NOT TO BE REPRODUCED, DISCLOSED OR USED WITHOUT THE EXPRESS PERMISSION OF THE LINCOLN ELECTRIC CO.</p>	<p>UNLESS OTHERWISE SPECIFIED TOLERANCE ON HOLE SIZES PER E2056 ON 2 PLACE DECIMALS IS ±.02 ON 3 PLACE DECIMALS IS ±.002 ON ALL ANGLES IS ±.5 OF A DEGREE MATERIAL TOLERANCE ("X") TO AGREE WITH PUBLISHED STANDARDS.</p>	<p>Ch'ge. Sht. No.</p> <p>2-13-87G</p>	<p>THE LINCOLN ELECTRIC CO. EQUIP. TYPE LN-8N, -8S</p> <p>CLEVELAND, OHIO U.S.A.</p>	<p>OPERATING SCHEMATIC</p>
		<p>SCALE NONE</p> <p>DR FI / 71 DATE 6-25-97 CHK REF.</p>		