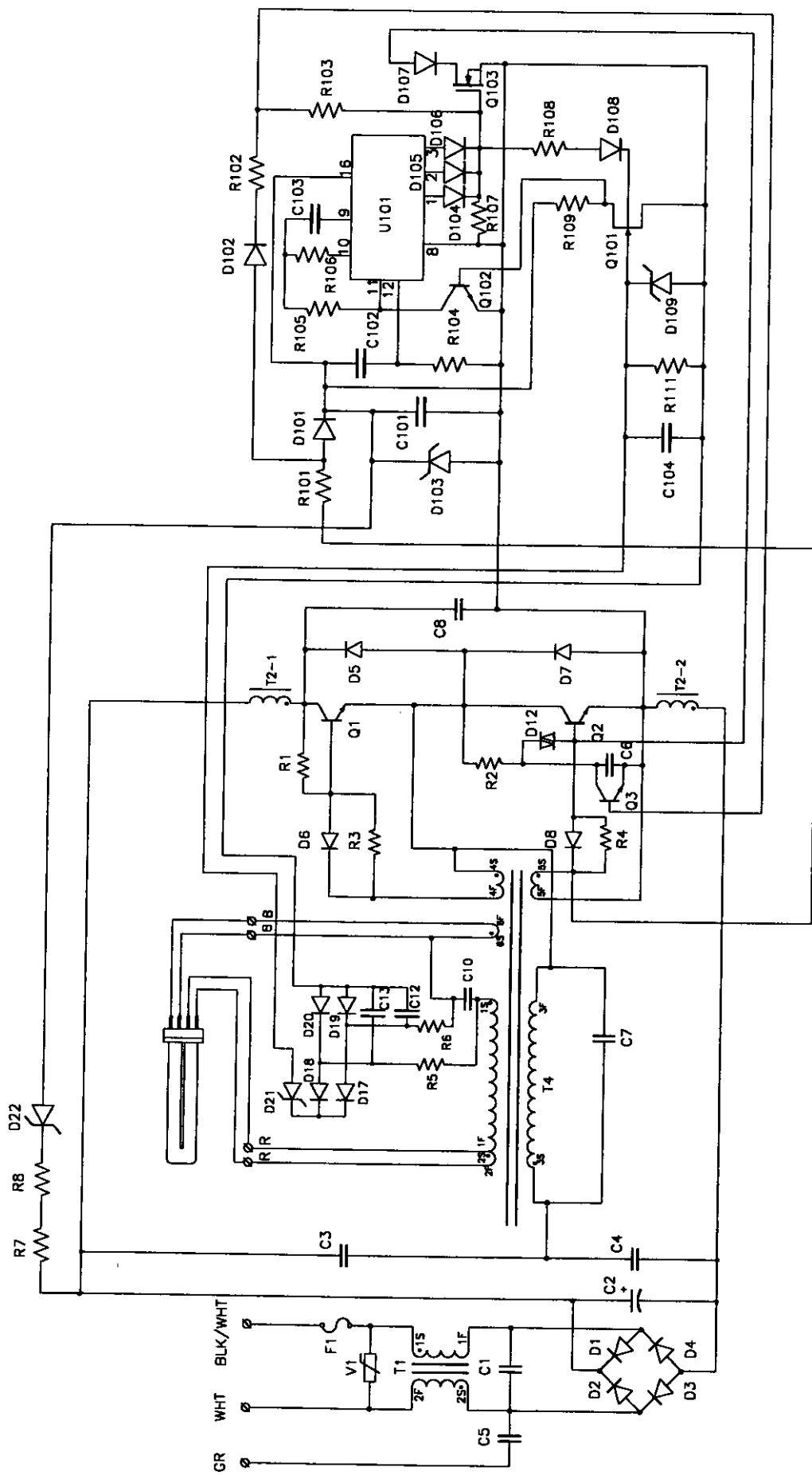




**ELECTRONIC BALLAST
TECHNOLOGY, INC.
23600 TELLO AVENUE
TORRANCE, CA 90505**



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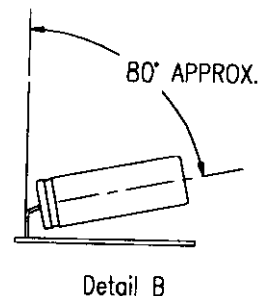
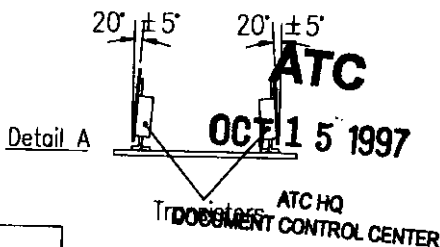
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ENGINEERING PROCESS INSTRUCTIONS:

1. Use automatic insertion machine for small axial and/or radial leaded components.
2. Manually insert capacitors and varistors.
3. For electrolytic capacitors and diodes, take note of polarity.
4. For all sub-assembly insertion, check for pin designations, color codes and assembly orientations.
5. Check for proper color codes and length of lead wires.
6. When all components and assemblies are inserted, run assembly thru soldering conveyor, flux and dip soldering.
7. Trim excess leads after wave soldering.
8. Visually inspect component and trace sides.
Do touch-up and repair if necessary.
9. Perform electrical tests according to test specification sheet.
For Test parameter, refer to 87-701-018.
10. For Circuit schematic, refer to 89-701-288.
11. Component C2 is bent inward approximately 80°. (see detail B)
12. Components R5 & R6 are located underneath C10 component.
Components R3, D5, D6, D17, D18 & D19 are located underneath T4 component.
Components D1, D2, D3, & D4 are located underneath C1 component.
Component D22 is located underneath C3 component.
Component D103 is located underneath C4 component.
Components R7, R8, R104, R108, R110, R111, D104, D105, D106, D108, & U101 are underneath C2 component.
13. Component C11 is not used.
14. Red lead wires are placed in positions 1R & 2R.
Blue wires are placed in positions 1B & 2B.
Black/White lead wire is inserted in BLK position.
15. Transistors assembly should be bent inwards at an angle of not more than 25°. (see Detail A). See drawing 86-001-006 figure 1 for preforming.
16. Insert Q103 with connected pins facing R103/D107.

Place jumper wire into R110 position.



R111
Autoinsert D109 Zener into R111 position and manually insert R111



CAUTION
ELECTROSTATIC
DISCHARGE SENSITIVE

Use grounding strap when handling this device.

SEE SEPARATE BOM 98-221-096-00
ASSEMBLY DRAWING

B	97N2217 CHANGE DRAWING ZONE C,D-1,2,3	JE	10.13.97	ADVANCE O'HARE INTERNATIONAL CENTER 10275 WEST HIGGINS ROAD ROSEMONT, ILLINOIS 60018-5803	
A	PRODUCTION RELEASE	JT	10.24.96		
REV.	ZONE	DESCRIPTION OF CHANGE (ECN NO.)	BY	DATE	TITLE:
					PCB ASSEMBLY (HFL-120-1/39 RS)
UNLESS OTHERWISE SPECIFIED UNITS ARE IN MILLIMETERS (mm) TOLERANCES ARE:		APPROVED BY: <i>[Signature]</i> DATE: 10/10/97 RECD. FACILITY FOR PRODT. DING. MAINTENANCE		ATC # SIZE PART NO. 98-221-096-00 SCALE NTS DATE 10.24.96	
FRACTIONS: DECIMALS: ANGLES:		APPROVED BY: <i>[Signature]</i> DATE: 10/10/97 RECD. FACILITY FOR PRODT. DING. MAINTENANCE		PHILIPS 12NC DWG NO. 98-221-096 REV. B	
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