

VMIVME-PS150 THROUGH VMIVME-PS750

SWING OUT POWER SUPPLIES

INSTRUCTION MANUAL

DOCUMENT NO. 500-000023-000 C

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RECORD OF REVISIONS

REVISION LETTER	DATE	PAGES INVOLVED	CHANGE NUMBER
A	04/14/94	Release Manual	94-0399
B	10/03/94	Cover, Page ii, and Reformatted Section 4	94-0784
C	11/9/94	Section 1 and Section 3 of TOC	94-0896

VMIC SAFETY SUMMARY

THE FOLLOWING GENERAL SAFETY PRECAUTIONS MUST BE OBSERVED DURING ALL PHASES OF THE OPERATION, SERVICE, AND REPAIR OF THIS PRODUCT. FAILURE TO COMPLY WITH THESE PRECAUTIONS OR WITH SPECIFIC WARNINGS ELSEWHERE IN THIS MANUAL VIOLATES SAFETY STANDARDS OF DESIGN, MANUFACTURE, AND INTENDED USE OF THIS PRODUCT. VME MICROSYSTEMS INTERNATIONAL CORPORATION ASSUMES NO LIABILITY FOR THE CUSTOMER'S FAILURE TO COMPLY WITH THESE REQUIREMENTS.

GROUND THE SYSTEM

To minimize shock hazard, the chassis and system cabinet must be connected to an electrical ground. A three-conductor AC power cable should be used. The power cable must either be plugged into an approved three-contact electrical outlet or used with a three-contact to two-contact adapter with the grounding wire (green) firmly connected to an electrical ground (safety ground) at the power outlet.

DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE

Do not operate the system in the presence of flammable gases or fumes. Operation of any electrical system in such an environment constitutes a definite safety hazard.

KEEP AWAY FROM LIVE CIRCUITS

Operating personnel must not remove product covers. Component replacement and internal adjustments must be made by qualified maintenance personnel. Do not replace components with power cable connected. Under certain conditions, dangerous voltages may exist even with the power cable removed. To avoid injuries, always disconnect power and discharge circuits before touching them.

DO NOT SERVICE OR ADJUST ALONE

Do not attempt internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.

DO NOT SUBSTITUTE PARTS OR MODIFY SYSTEM

Because of the danger of introducing additional hazards, do not install substitute parts or perform any unauthorized modification to the product. Return the product to VME Microsystems International Corporation for service and repair to ensure that safety features are maintained.

DANGEROUS PROCEDURE WARNINGS

Warnings, such as the example below, precede only potentially dangerous procedures throughout this manual. Instructions contained in the warnings must be followed.

WARNING

DANGEROUS VOLTAGES, CAPABLE OF CAUSING DEATH, ARE PRESENT IN THIS SYSTEM. USE EXTREME CAUTION WHEN HANDLING, TESTING, AND ADJUSTING.

SAFETY SYMBOLS

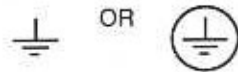
GENERAL DEFINITIONS OF SAFETY SYMBOLS USED IN THIS MANUAL



Instruction manual symbol: the product is marked with this symbol when it is necessary for the user to refer to the instruction manual in order to protect against damage to the system.



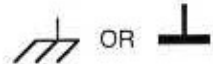
Indicates dangerous voltage (terminals fed from the interior by voltage exceeding 1000 volts are so marked).



Protective conductor terminal. For protection against electrical shock in case of a fault. Used with field wiring terminals to indicate the terminal which must be connected to ground before operating equipment.



Low-noise or noiseless, clean ground (earth) terminal. Used for a signal common, as well as providing protection against electrical shock in case of a fault. Before operating the equipment, terminal marked with this symbol must be connected to ground in the manner described in the installation (operation) manual.



Frame or chassis terminal. A connection to the frame (chassis) of the equipment which normally includes all exposed metal structures.



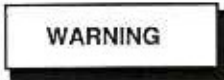
Alternating current (power line).



Direct current (power line).



Alternating or direct current (power line).



The WARNING sign denotes a hazard. It calls attention to a procedure, a practice, a condition, or the like, which, if not correctly performed or adhered to, could result in injury or death to personnel.



The CAUTION sign denotes a hazard. It calls attention to an operating procedure, a practice, a condition, or the like, which, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the system.

NOTE:

The NOTE sign denotes important information. It calls attention to a procedure, a practice, a condition or the like, which is essential to highlight.

**VMIVME-PS150 THROUGH VMIVME-PS750
SWING OUT POWER SUPPLIES**

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APPENDIX

- A Assembly Drawing, Parts List, and Schematic

SECTION 1

INTRODUCTION

The VMIVME-PS150 through VMIVME-PS750 Swing Out Power Supplies provide the user with a selection of DC voltages and currents for providing power to VMEbus chassis containing CPU, Memories, Interface, Analog, Digital, and Synchro/Resolver Boards.

1.1 FEATURES

The VMIVME-PS150 through VMIVME-PS750 Swing Out Power Supplies have AC autoranging that automatically selects the appropriate input operating range of the power supply to match the AC line supply voltage (115 or 230 V, 50/60 Hz) without user intervention. Each power supply is shipped with two different power cords (115 V and 230 V). These power supplies are designed to be mounted to the rear of the J1/P1 backplanes, thus permitting full access to the J2/P2 backplane area for I/O cabling. These power supplies are high efficiency up to 80 percent with built-in RFI filtering, overvoltage protection, fast recovery, and short response time as standard features.

1.2 FUNCTIONAL DESCRIPTION

VMIVME-PS150 through VMIVME-PS750 Swing Out Power Supplies provide high-quality, high-efficiency, high-density DC power with the lowest failure rate feasible, utilizing a proprietary switching design called Veri-Drive Plus, which overcomes many previous cross-conduction problems common to switching power supplies. Cross-conduction cannot occur with Veri-Drive Plus, even at 100 percent effective duty cycles, by eliminating DC imbalance in the primary winding of the switching transformer, thus preventing spiking and component stress associated with core saturation. Soft start circuit to limit inrush current at turn on or power interrupt cycle time is standard on all VMIVME-PS150 through VMIVME-PS750 power supplies.

1.3 REFERENCE MATERIAL LIST

See Appendix A.

SECTION 2

PHYSICAL DESCRIPTION AND SPECIFICATIONS

2.1 PHYSICAL DESCRIPTION AND SPECIFICATIONS

Physical description and specifications can be found in the Specification 800-000023-000.

2.2 ASSEMBLY DRAWINGS

For assembly drawings, please see Appendix A.

2.3 LAYOUTS

For layout drawings, please see Appendix A.

2.4 SCHEMATICS

For schematics, please see Appendix A.

SECTION 3

INSTALLATION

3.1 GENERAL INSTALLATION

The VMIVME-PS150 through VMIVME-PS750 Swing Out Power Supplies are mounted to the backside of VMIC's standard VMIVME-120 chassis. All required mounting hardware is included with the power supply chassis. See the assembly drawings 150-000116-000 in Appendix A.

Replace the board chassis backplane top rail mounting screws with the new, longer screws to mount the power supply chassis side panels. Matching holes of the side panels can be bolted to the matching holes of the chassis side panels' connector-protector protrusions with the mounting hardware supplied. (If the protector protrusions do not have the two matching holes, then holes may be added to match the power supply chassis side panels' holes.)

The power supply chassis are made to fit the board chassis side panels and their protrusions. This provides excellent support for the power supply. After securing the power supply side panels, fasten the top and bottom gusset braces to the power supply mounting plate with the four sets of screw hardware.

Connect the power supply DC output wiring harness (black wire(s)) to the backplane DC power ground connecting points. Connect the red wire(s) to the backplane +5 V connecting points.

When ± 12 and/or ± 15 V are used, connect the orange wire(s) to the backplane +12 V connecting point, the blue wire(s) to the -12 V connecting point, the yellow wire(s) to the +15 V connecting point, and the violet wire(s) to the -15 V connecting point. (Note that not all backplanes require the 12 V and/or 15 V.) The auxiliary outputs common connects to the backplane main DC power ground connecting point.

3.2 REQUIRED EQUIPMENT, TOOLS, TEST, AND CHECK POINTS

NOTE: Each power supply is fully loaded and tested after final assembling for compliance.

- a. Nonmetallic adjuster tool (flat blade screwdriver type)
- b. Quality DVM (Fluke 77 or equivalent)
- c. Metering test points are DC-bus tie point(s) on backplane

3.3 BEFORE APPLYING AC POWER

- a. Verify the DC voltage leads, polarity, and backplane connections
- b. Verify each DC voltage lead electrical connections for **tightness** to ensure very low contact resistance
- c. Insert the VMEbus boards into the respective chassis slots and seat firmly

3.4 APPLYING AC POWER

The VMIVME-PS150 through VMIVME-PS750 Power Supplies are shipped with the internal switching frequency and the current limits preset and sealed. Improper adjustments of these internal settings will cause damage to the power supply circuitry and/or loading circuit(s). Tampering or alteration of these adjustments is not recommended, refer such service adjustments and other servicing to VMIC.

The DC output voltage(s) is preadjusted to nominal output ± 0.05 percent. The power supply's DC output may be readjusted ± 5 percent by the DC adjustment potentiometer if required. Plug and connect the appropriate power cord to the AC Line Power (115 V or 230 VAC).

Turn AC power ON, then recheck the backplane DC voltage(s) and readjust the power supply as required.

Please refer to Appendix A for drawings, layouts, and schematics.

SECTION 4

MAINTENANCE

4.1 MAINTENANCE

This section provides information relative to the care and maintenance of VMIC's products. If the products malfunction, verify the following:

- a. Software
- b. System configuration
- c. Electrical connections
- d. Jumper or configuration options
- e. Boards are fully inserted into their proper connector location
- f. Connector pins are clean and free from contamination
- g. No components of adjacent boards are disturbed when inserting or removing the board from the chassis
- h. Quality of cables and I/O connections

If the products must be returned, contact VMIC for a Return Material Authorization (RMA) Number. **This RMA Number must be obtained prior to any return.**

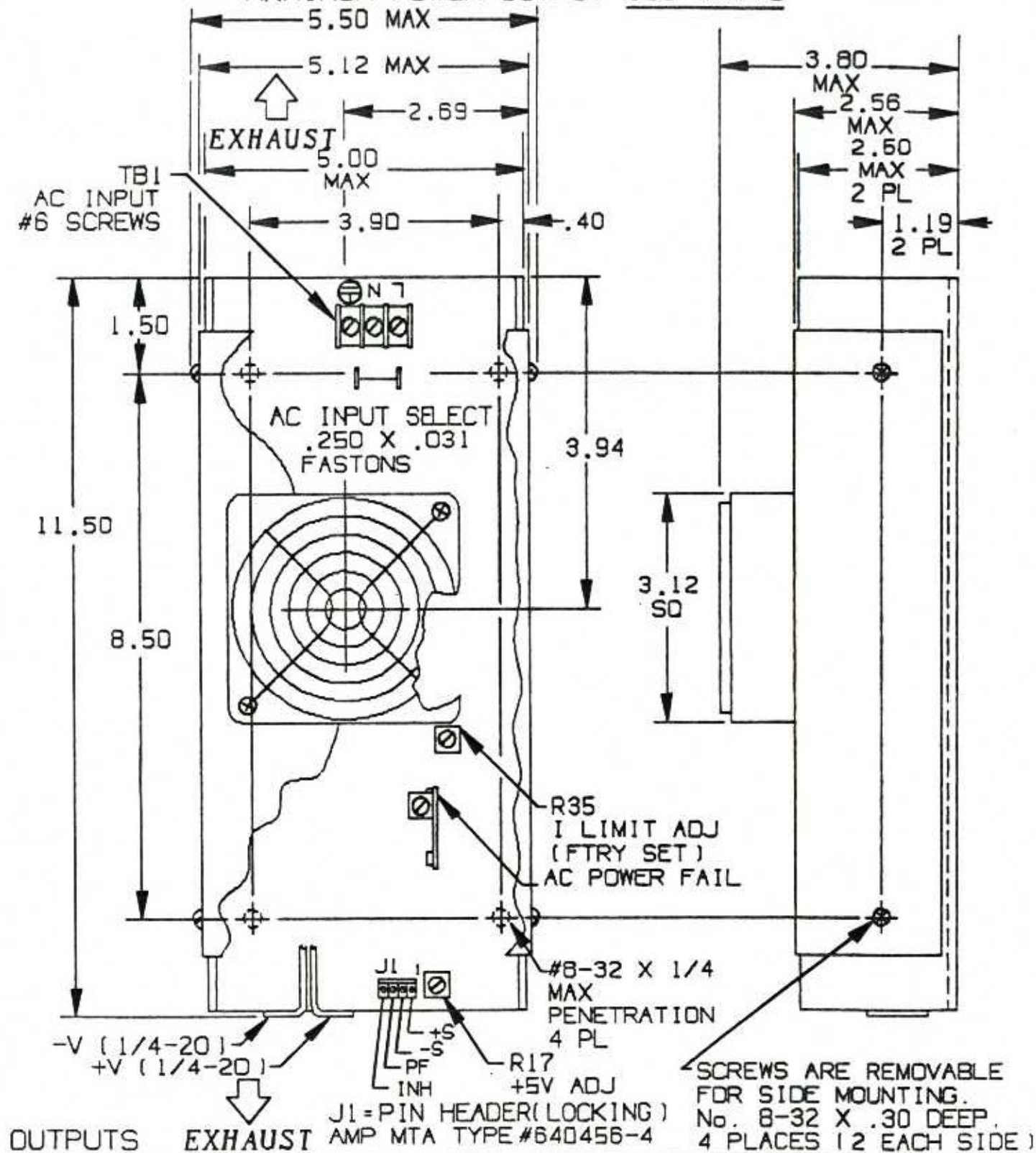
4.2 MAINTENANCE PRINTS

User-level repairs are not recommended. The appendix to this manual contains drawings and diagrams for reference purposes only.

APPENDIX A

PARTS LIST, LAYOUTS, AND SCHEMATICS

MAXIMUM POWER OUTPUT 350 WATTS



OUTPUTS

+V +5VDC AT 70A

-V COMMON

NOTE:

THIS UNIT HAS AC AUTORANGE VOLTAGE SELECTOR: AUTOMATICALLY SELECTS PROPER AC LINE VOLTAGE RANGE TO ENABLE POWER OPERATION AT EITHER 115VAC OR 230VAC

AC INPUT IN NORTH AMERICA

115VAC

L=LINE

N=NEUTRAL

⊖=SAFETY GND

230VAC

L=LINE 1

N=LINE 2

⊖=SAFETY GND

[illegible]

TODD PRODUCTS CORP.				MODEL		FINAL ASSY		SCS -70		BATCH QTY		BATCH NO.		
SHEET	2	OF	2	B/M NC.	9600851	ISSUE	A	DATE	12-12-88	MATERIAL	DATE REQ'D	DATE ISSUED	SUPV	
DEPT	SHEETS	BY	DB	APP'D	EE	M.E.		DATE REL.		PROD. CONT	BY	DATE	DATE POSTED	
LINE NO.	PART NO.	ISS. SIZE	DESCRIPTION						ECN	QTY PER UNIT			SPACING	
									ACC	F.S.	BUY	F	S	
1			CR1 TO CHASSIS (CONT)											
2	7055004		SCREW #6-32x7/8 LG FH, 82° PH									1		
3	77000001		WASHER #6 FLAT									1		
4	77300002		WASHER #6 SP/LK									1		
5	75000005		NUT, HEX #6-32 x 1/4 A.F.									1		
6														
7														
8	74700035		CR12 TO CHASSIS											
9	67100096		SCREW #8-32 x 9/16 LG FLAT, SL									4		
10			INSULATOR, MICA									1		
11	6610184		NUT PLATE									1		
12														
13														
14														
15			THERMAL SWITCH TO CHASSIS											
16	70530004		SCREW #4-40x3/8 LG 82° FH PH									2		
17	77300001		WASHER #4 SP/LK									2		
18	75000004		NUT, HEX #4-40 x 3/16 A.F.									2		
19														
20	6830751		NAMEPLATE									1		
21			"MARK MODEL" SCS-70											
22			"MARK INPUT" 350											
23														
24	9010811		SCHEMATIC - MAIN									REF		
25														
26														
27														
28														
29														
30														

5) WITH OPTION "A" REMOVE RESISTOR R1

F1
115V~
15A FB 250V~
230V~
8A FB 250V~

L

N

⊕

C2
.005/
250VAC

L1
1100461

R1
82K
2W
5%

(OPT "A")
SEE NOTE 5

M

N

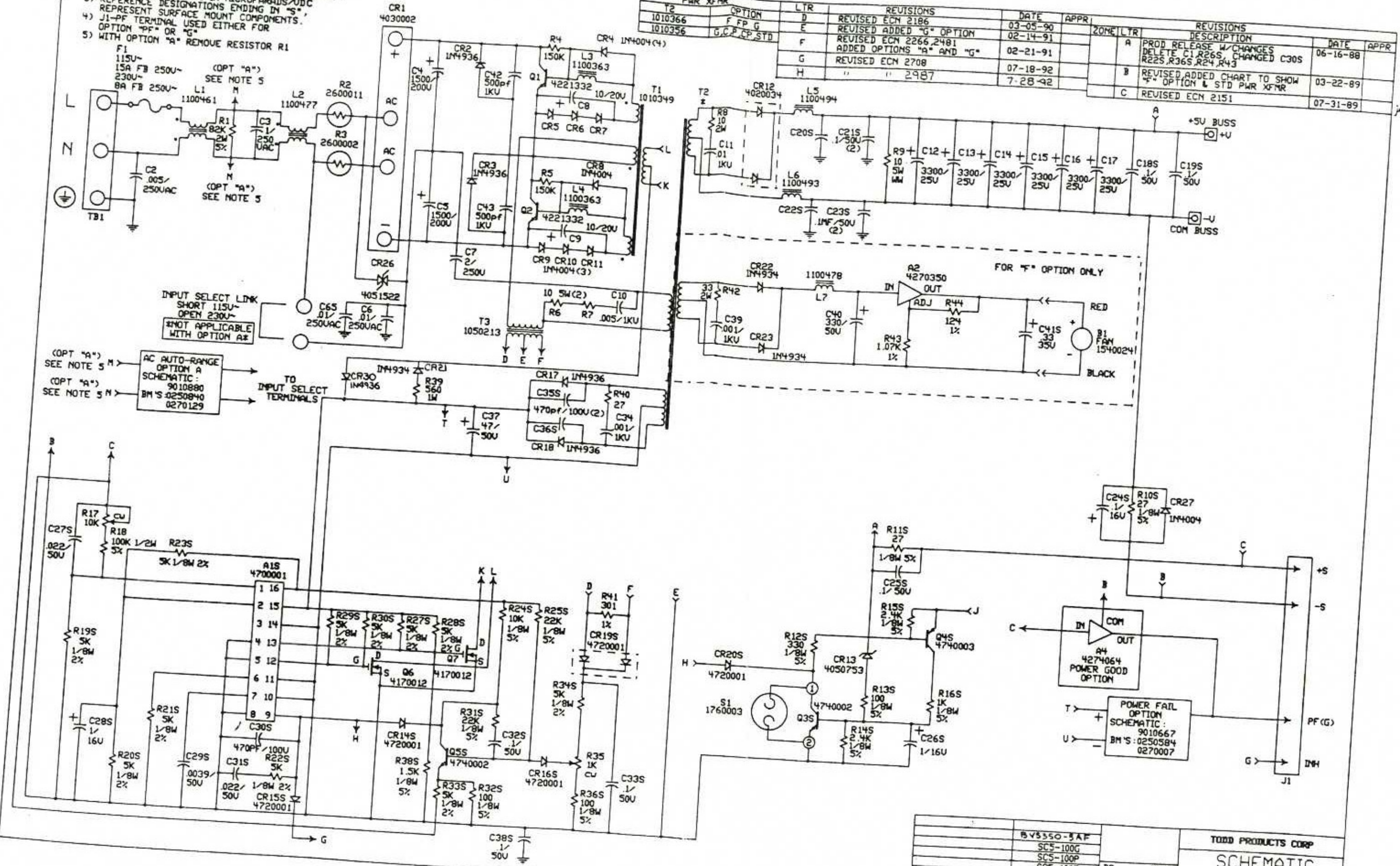
(OPT "A")
SEE NOTE 5

C3
1/
250 VAC

L2
110047

PWR XFMR		LTR	REVISIONS	DATE	APPR
T2	OPTION	D	REVISED ECM 2186	03-05-90	
1010366	F P P G	E	REVISED ADDED "G" OPTION	02-14-91	
1010356	G, C, P, STD	F	REVISED ECM 2266, 2481 ADDED OPTIONS "A" AND "G"	02-21-91	
		G	REVISED ECM 2708	07-18-92	
		H	" " 2487	7-28-92	

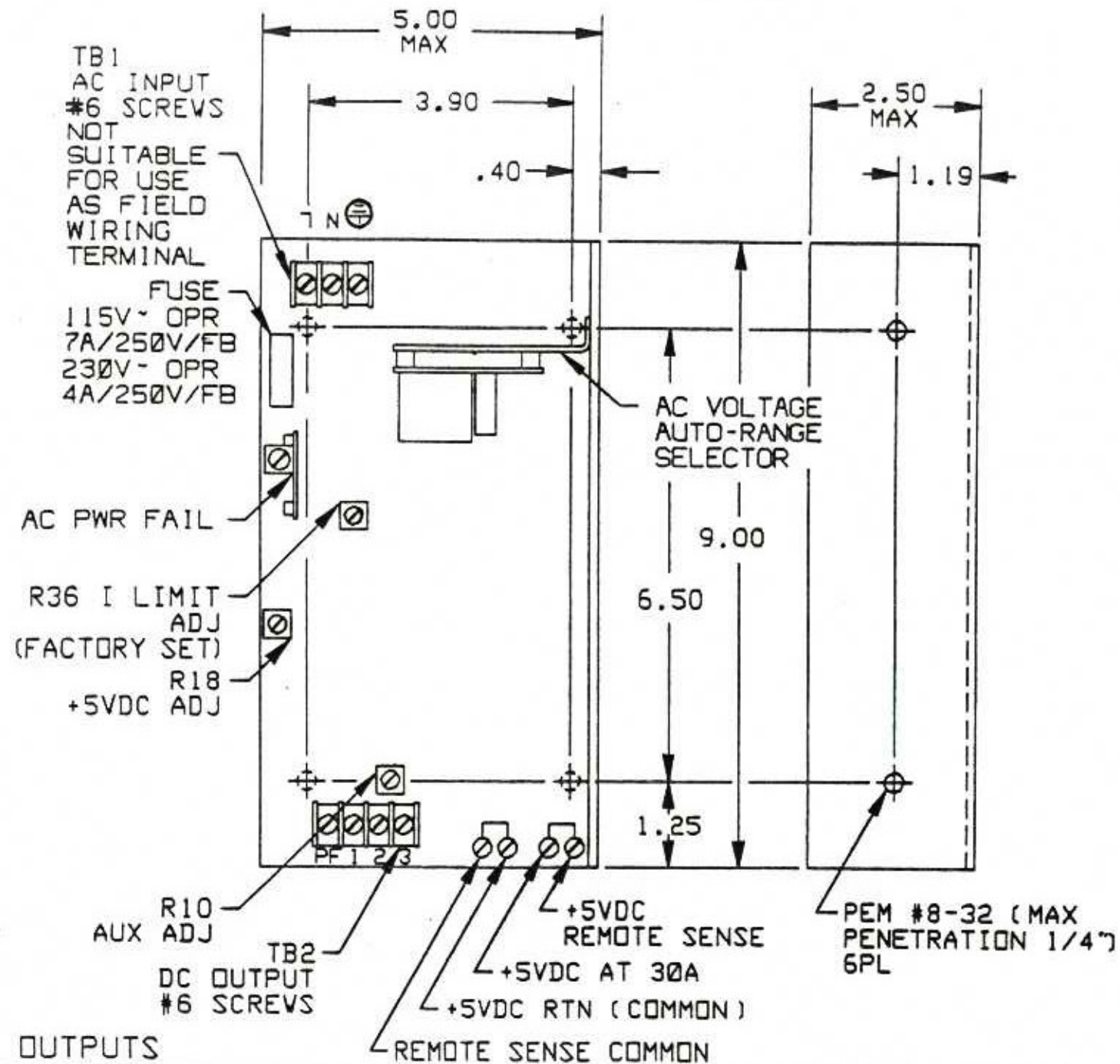
ZONE	LTR	DESCRIPTION	DATE	APPR
	A	PROD RELEASE W/CHANGES DELETE C1, R26S, CHANGED C30S R22S, R36S, R24, R43	06-16-88	
	B	REVISED ADDED CHART TO SHOW "F" OPTION & STD PWR XFMR	03-22-89	
	C	REVISED ECM 2151	07-31-89	



BV5550-5AF		DR LS DATE 03/05/90 CHK DATE		TODD PRODUCTS CORP	
SC5-100G				SCHEMATIC SC5-70	
SC5-100P					
SC5-100F					
SC5-100					
NEXT ASSY	USED ON	SZ IDENT B No. 34337		DRAWING No. 9010811	
APPLICATION		SCALE NONE		SHEET 1 OF	

TODD MODEL MTC-163-0512AP

MAX POWER OUTPUT 160W



TB2-1 -12VDC AT 1.5A
TB2-2 $\pm$ 12VDC RTN
TB2-3 +12VDC AT 1.5A
TB2-PF POWER FAIL

INPUT RATINGS:
115/230V~ 7/4A 50-60 Hz

$\pm$ BUSS & SENSE
CONNECTIONS
#6 SCREWS

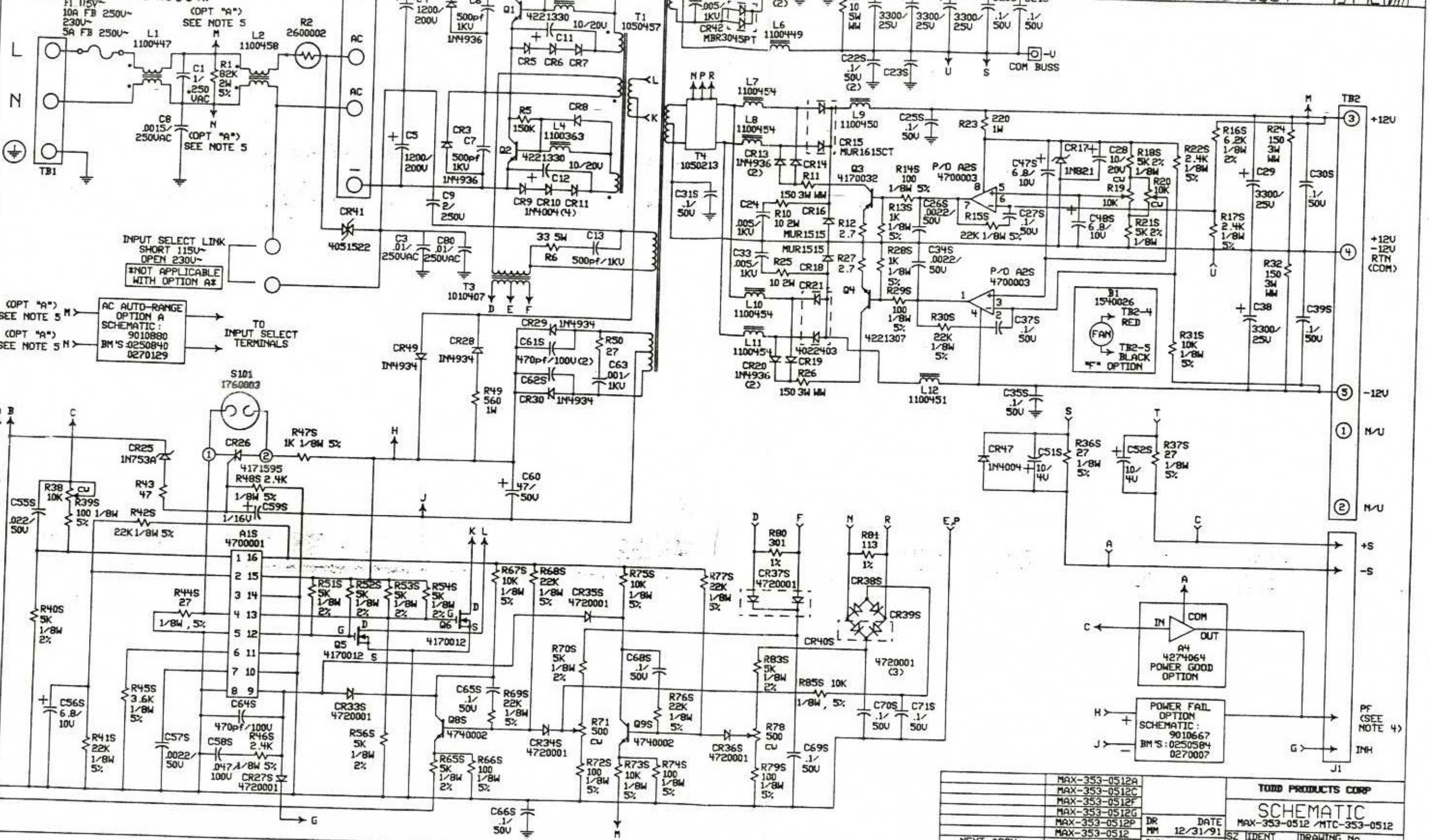
AC INPUT IN NORTH AMERICA

115VAC 230VAC
L=LINE L=LINE 1
N=NEUTRAL N=LINE 2
 $\oplus$ =SAFETY GND $\oplus$ =SAFETY GND

TODD PRODUCTS CORP.				MODEL FINAL ASSY MTC-163-0512				BATCH QTY		BATCH NO.	
SHEET 1	OF 2	B/M NO.	9600795	ISSUE A	DATE 2-1-88	MATERIAL ISSUE	DATE REQ'D	DATE ISSUED	S. V		
DEPT	SHEETS	181	DB	APP'D EE	M.E.	DATE REL.	BY	DATE	DATE POSTED		
LINE NO.	PART NO.	ISS. SIZE	DWG. SIZE	DESCRIPTION		ECN	QTY PER UNIT		NO. OF UNITS	TOTAL QTY	
							ACC	F.S.	BUY		
1	6010194			CHASSIS - FAB					1		
2	7800007			SPACER, BUSHING					5		
3											
4											
5	0250753			COMP BOARD ASSY					1		
6				(P.C. BD TO CHASSIS HDW)							
7	7013005			SCREW #4-40X7 1/16 LG PAN HD, PH					2		
8	7700005			WASHER - #4 FLAT, REDUCED O.D.					2		
9	7730001			WASHER - #4 SPLIT LOCK					2		
10	6710084			INSULATOR - CHASSIS					1		
11				(REGULATOR TO CHASSIS HDW)							
12	7780022			INSULATOR, MICA					2		
13	7780020			WASHER - #4 SHOULDER					2		
14	7700005			WASHER - #4 FLAT, REDUCED O.D.					2		
15	7730001			WASHER - #4 SPLIT LOCK					2		
16	7013005			SCREW - #4-40X7 1/16 LG PAN HD, PH					2		
17											
18				(DIODE TO CHASSIS HDW)							
19	7053002			SCREW - #4-40X5/8 LG FLAT HD, PH					1		
20	6510174			HEATSINK PLATE					1		
21	7780028			INSULATOR, MICA					1		
22	7780029			INSULATOR, BUSHING					1		
23	7700005			WASHER - #4 FLAT, REDUCED O.D.					1		
24	7730001			WASHER - #4 SPLIT LOCK					1		
25	7500003			NUT, HEX - #4-40X 1/4 A.F.					1		
26											
27				(THERMAL SW TO CHASSIS HDW)							
28	7053004			SCREW #4-40X3/8 LG, B2° FH, PH					2		
29	7730001			WASHER, #4 SP/LK					2		
30	7500004			NUT - HEX #4-40X3/16 AF					2		

TODD PRODUCTS CORP.				MODEL FINAL ASSY MTC-163-0512				BATCH QTY		BATCH NO.					
SHEET 2 OF 2		B/M NO. 9600795		ISSUE A		DATE 2-1-88		MATERIAL ISSUE		DATE REQ'D		DATE ISSUED		DATE POSTED	
DEPT		SHEETS		IBY DB		APP'D		EE M.E.		DATE REL		PROD. CONT. APPV		BY DATE	
LINE NO.	PART NO.	ISS.	DWG. SIZE	DESCRIPTION				ECN	QTY PER UNIT		NO. OF UNITS		TOTAL QTY		
1				(TSIR H.S. TO CHASSIS HQW)											
2	7055013			SCREW #6-32X3/4 82° FH, PH							2				
3	6710071			WASHER - INSULATOR							1				
4	7180032			WASHER - #6 SHOULDER							2				
5	7800021			SPACER - UNTHD							2				
6	7700001			WASHER - #6 FLAT							2				
7	7730002			WASHER - #6 SPLITLOCK							2				
8	7500005			NUT-HEX #6-32X1/4 A.F.							2				
9															
10															
11	6830751			NAMEPLATE							1				
12				"MARK MODEL" MTC-163-0512											
13				"MARK INPUT" 250											
14															
15															
16															
17	9010805			SCHEMATIC							REF				
18															
19															
20															
21				(P.C. BOARD TO CHASSIS HQW)											
22	7015002			SCREW #6-32X7/16 LG, PAN HD, PH							1				
23	7700006			WASHER #6 FLAT, REDUCED O.D.							1				
24	7730002			WASHER #6 SPLITLOCK							1				
25															
26															
27															
28															
29															
30															

- NOTE
UNLESS OTHERWISE SPECIFIED-
1) ALL RESISTORS ARE IN OHMS, 1/2 WATT, +/-10%
2) ALL CAPACITORS ARE IN MICROFARADS/UDC
3) REFERENCE DESIGNATIONS ENDING IN "S" REPRESENT SURFACE MOUNT COMPONENTS.
4) J1-PF TERMINAL USED EITHER FOR OPTION "PF" OR "G"
5) WITH OPTION "A" REMOVE RESISTOR R1, AND CHANGE L2 TO 1100641.

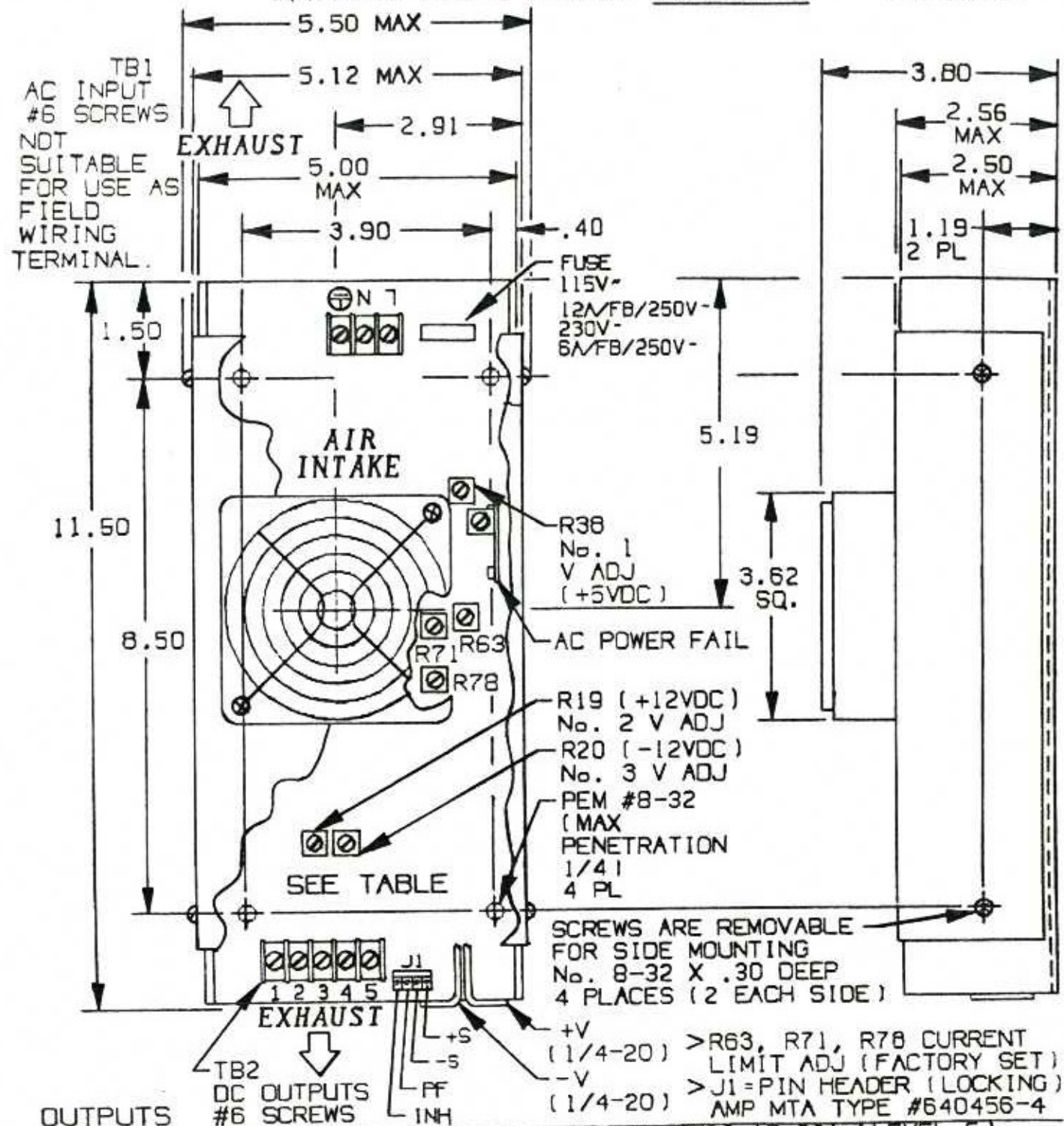


REVISIONS			
ZONE/LTR	DESCRIPTION	DATE	APPR
M	REDRAWN AND REVISED ECN 2681, 2691	11/01/91	
M	REVISED ECN 2746	12/31/91	
O	REVISED ECN 2887	5-1-92	

		MAX-353-0512A		TODD PRODUCTS CORP	
		MAX-353-0512C			
		MAX-353-0512F			
		MAX-353-0512G			
		MAX-353-0512P			
		MAX-353-0512		SCHEMATIC	
NEXT ASSY		USED ON		MAX-353-0512 /MTC-353-0512	
APPLICATION		DR MM		DATE 12/31/91	
		CHK		DATE	
		SZ		IDENT	
		D		DRAWING No.	
		SCALE NONE		9010775	
				SHEET 1 OF 1	

TODD MODEL MAX-503-0512AFP
MAXIMUM POWER OUTPUT 500 WATTS

11/03/92



OUTPUTS
TB2-1 NOT USED
TB2-2 NOT USED
TB2-3 +12VDC AT 10A AVG/16A PK.
(LEVEL 3)
TB2-4 ±12VDC RTN (COMMON)
TB2-5 -12VDC AT 10A (LEVEL 3)
UNIT IS LEVEL 6 PER CSA
BULLETIN 1402 A/B/C.

INPUT RATINGS:
115/230V 6.7/3.4A 50-60Hz

+V +5VDC AT 80A (LEVEL 5)
-V COMMON
AC INPUT IN NORTH AMERICA
115VAC 230VAC
L=LINE 1
N=NEUTRAL N=LINE 2
⊕=SAFETY GND ⊕=SAFETY GND

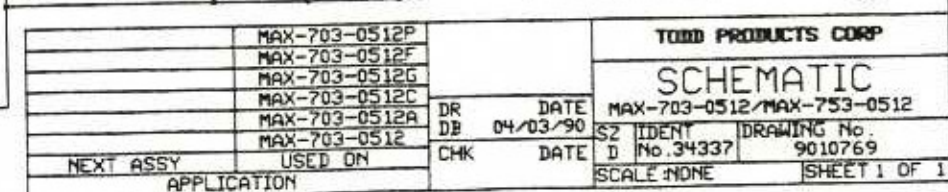
NOTE:
THIS UNIT HAS AC AUTORANGE VOLTAGE
SELECTOR: AUTOMATICALLY SELECTS
PROPER AC LINE VOLTAGE RANGE TO
ENABLE POWER OPERATION AT EITHER
115VAC OR 230VAC.

TODD PRODUCTS CORP.		MODEL		FINAL ASSY MAX-03-0512		BATCH QTY		BATCH NO.		
SHEET	OF	B/M NO.	ISSUE	DATE	DATE	MATERIAL	DATE REQ'D	DATE ISSUED	SUP'Y	
DEPT		BY	APP'D	E.E.	M.E.	DATE REL	BY	DATE	DATE POSTED	
LINE NO.	PART NO.	ISS. SIZE	DESCRIPTION			ECN	QTY PER UNIT		SPACING	
							ACC	F.S.	BUY	
									F	
									S	
1	6010225		CHASSIS - FAB						1	
2	7800007		SPACER, BUSHING						4	
3	6710098		INSULATOR, CHASSIS						1	
4										
5	6770192		HOUSING, 4 POS						1	
6										
7	0250740		COMP BD ASSY						1	
8										
9			PC BD SAFETY GND TO CHASSIS							
10	7015002		SCREW #6-32x7/16 LG, PAN HD, PH						1	
11	7700006		WASHER #6 FLAT REDUCED O.D						1	
12	7730002		WASHER #6 SP/LK						1	
13										
14			PC BD TO CHASSIS HOW							
15	7013005		SCREW #4-40x7/16 LG, PAN HD, PH						3	
16	7700005		WASHER #4 FLAT REDUCED O.D						3	
17	7730001		WASHER #4 SP/LK						3	
18										
19			CRI TO CHASSIS HDW							
20										
21	7053002		SCREW #4-40x3/8 LG, 82° FH, PH			1912			1	
22	7700005		WASHER #4 FLAT			2963			1	
23	7730001		WASHER #4 SP/LK			2963			1	
24	7500004		NUT HEX #4-40x3/16 A.F			2963			1	
25										
26			INVERTER XSTR H.S. TO CHASSIS							
27	7055002		SCREW #6-32x7/16 LG 82° FH, PH						2	
28										
29										
30										

TODD PRODUCTS CORP.				MODEL				FINAL ASSY MAX-503-0512				BATCH QTY		BATCH NO.					
SHEET 2 OF 3		DEPT SHEETS		B/M NC. 9600779		ISSUE F		DATE 4-27-93		DATE REL		MATERIAL ISSUE		DATE REQ'D		DATE ISSUED		SUP'V	
BY		APP'D		EE		M.E.		DATE REL		PROG. CONT. APP'V		BY		DATE		DATE POSTED			
LINE NO.	PART NO.	ISS.	DWG SIZE	DESCRIPTION				ECN	QTY PER UNIT			SPACING							
									ACC	F.S.	BUY	F	S						
1				CR12 TO CHASSIS HDW.															
2	5150041			SLEEVEING				2562				2	.125						
3	7055003			SCREW #6-32x5/8 LG. FLAT HD. PH				2963				2							
4	6710096			INSULATOR, MICA															
5	5150040			SLEEVEING				2562				1							
6	6610206			NUT PLATE				2562				2	.250						
7	7055014			SCREW #6-32x1/2 LG. FH. PH				2963				2							
8				CR12 TO T2 LUGS HDW															
9	7015008			SCREW #6-32x5/16 LG PAN HD. PH								2							
10	5230001			SOLDER LUG								2							
11	7500005			NUT-HEX #6-32x1/4 AF								2							
12																			
13				CR12 BUSS BAR TO L5 LUG HDW															
14	7750003			LOCKWASHER, #10 EXT TOOTH								1							
15	7500006			NUT-HEX #10-32x3/8 A.F								1							
16																			
17				Q3,CR15,CR16 TO CHASSIS HDW															
18	7780022			INSULATOR, MICA TO220								3							
19	7780020			SHOULDER WASHER #4								3							
20	7053004			SCREW#4-40x3/8 LG. 82° F.H. PH								3							
21	7700005			WASHER #4 FLAT REDUCED O.D								3							
22	7730001			WASHER #4 SP/LK								3							
23	7500004			NUT-HEX #4-40x3/16 AF								3							
24																			
25				COVER TO MAG AMP HS HDW															
26	6210089			COVER - FAB															
27	7053008			SCREW #4-40x5/16 LG FLAT HD. PH				2012				1							
28												2							
29				COVER TO CHASSIS HDW															
30	7053008			SCREW #4-40x5/16 LG FLAT HD. PH				2012				2							

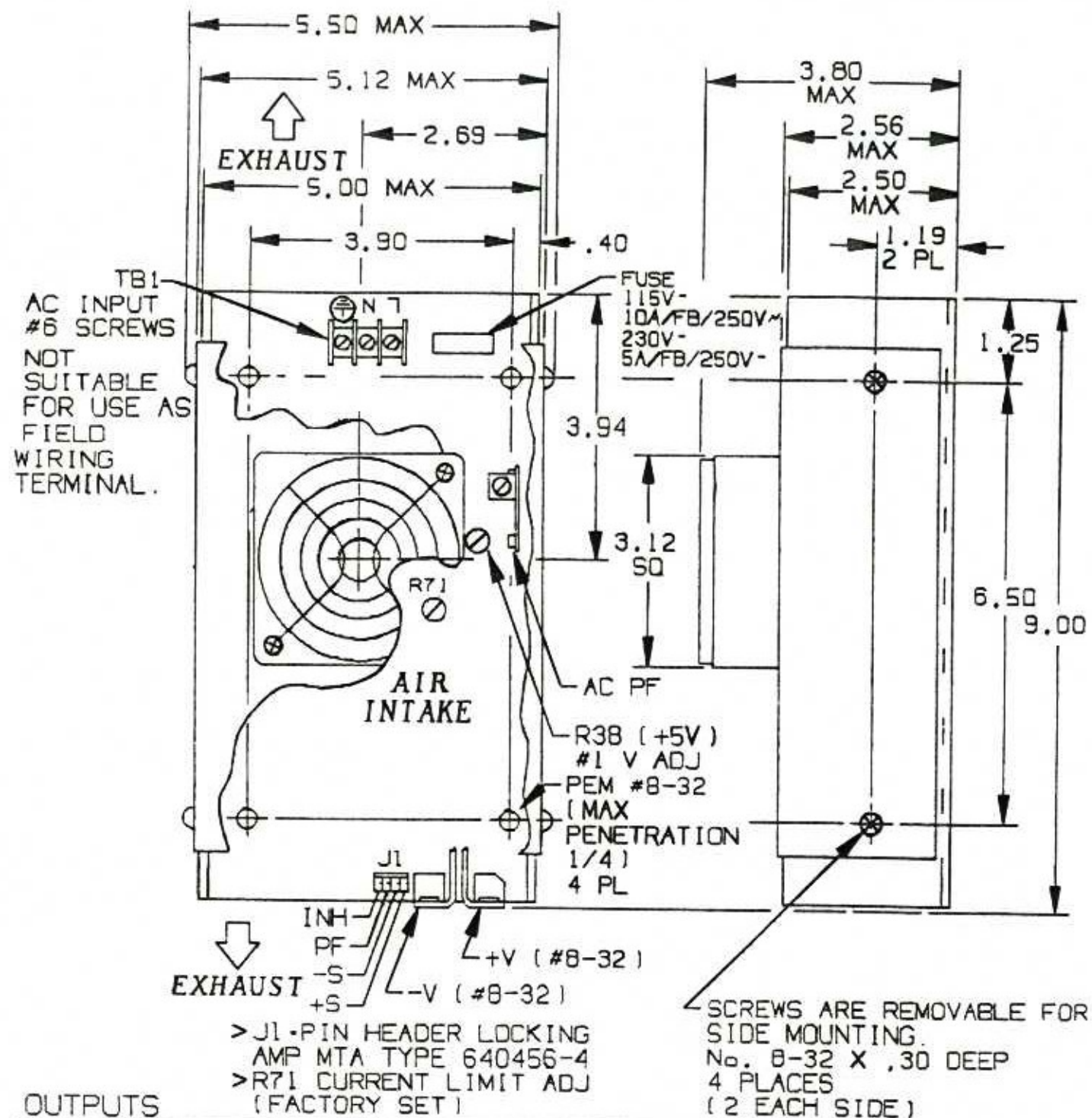
TODD INDUSTS CORP.				MODEL FINAL ASSY MAX-503-0512				BATCH QTY		BATCH NO.					
SHEET 3 OF 3		B/M NC. 9600779		ISSUE F		DATE 4-27-93		MATERIAL ISSUE		DATE REQ'D		DATE ISSUED		SUP'Y	
DEPT SHEETS		BY DB		APP'D EE		M.E.		DATE REL.		PROD. CONT. App'y		BY		DATE POSTED	
LINE NO.	PART NO.	ISS. SIZE	DESCRIPTION				ECN	QTY PER UNIT ACC F.S.		SPACING F S					
1	6830755		NAMEPLATE				3277			1					
2			"MARK MODEL" MAX-503-0512												
3			"MARK INPUT" 12A/6A				3277								
4															
5															
6	9010792		SCHEMATIC - MAIN									REF			
7															
8															
9															
10															
11	7053008		THERMAL SWITCH TO CHASSIS HOW												
12	7730001		SCREW #4-40X5/16LG 82°FH, PH 2012							2					
13	7500004		WASHER #4 SPILK							2					
14			NUT HEX #4-40X 3/16 A.F.							2					
15															
16															
17															
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28															
29															
30															

F1
115V~
15A FB 250V~
230V~
8A FB 250V~



ZONE LTR		REVISIONS DESCRIPTION	DATE	APPR
	A	PRODUCTION RELEASE	06/04/87	
	B	REVISED ECN 1890,1894	10/12/87	
	C	REVISED ECN 1902,1907	11/24/87	
	D	REVISED ECN 1966,2016,2025	08/10/88	
	E	REVISED ECN 2185	12/04/89	
	F	REVISED ECN 2233,2250,2257	04/04/89	
	G	REVISED ECN 2523	04/17/91	
	H	REVISED ECN 2664	12/17/91	
	J	REVISED ECN 2797	03/26/92	
	K	REVISED ECN 3049	08/24/93	10

TODD MODEL SC5-50AFP
 MAXIMUM POWER OUTPUT 250 WATTS 10/14/92



OUTPUTS

+V=+5VDC AT 50A
 -V=+5VDC RTN (COMMON)

NOTE: THIS UNIT HAS AC AUTORANGE VOLTAGE SELECTOR: AUTOMATICALLY SELECTS PROPER AC LINE VOLTAGE RANGE TO ENABLE POWER OPERATION AT EITHER 115VAC OR 230VAC

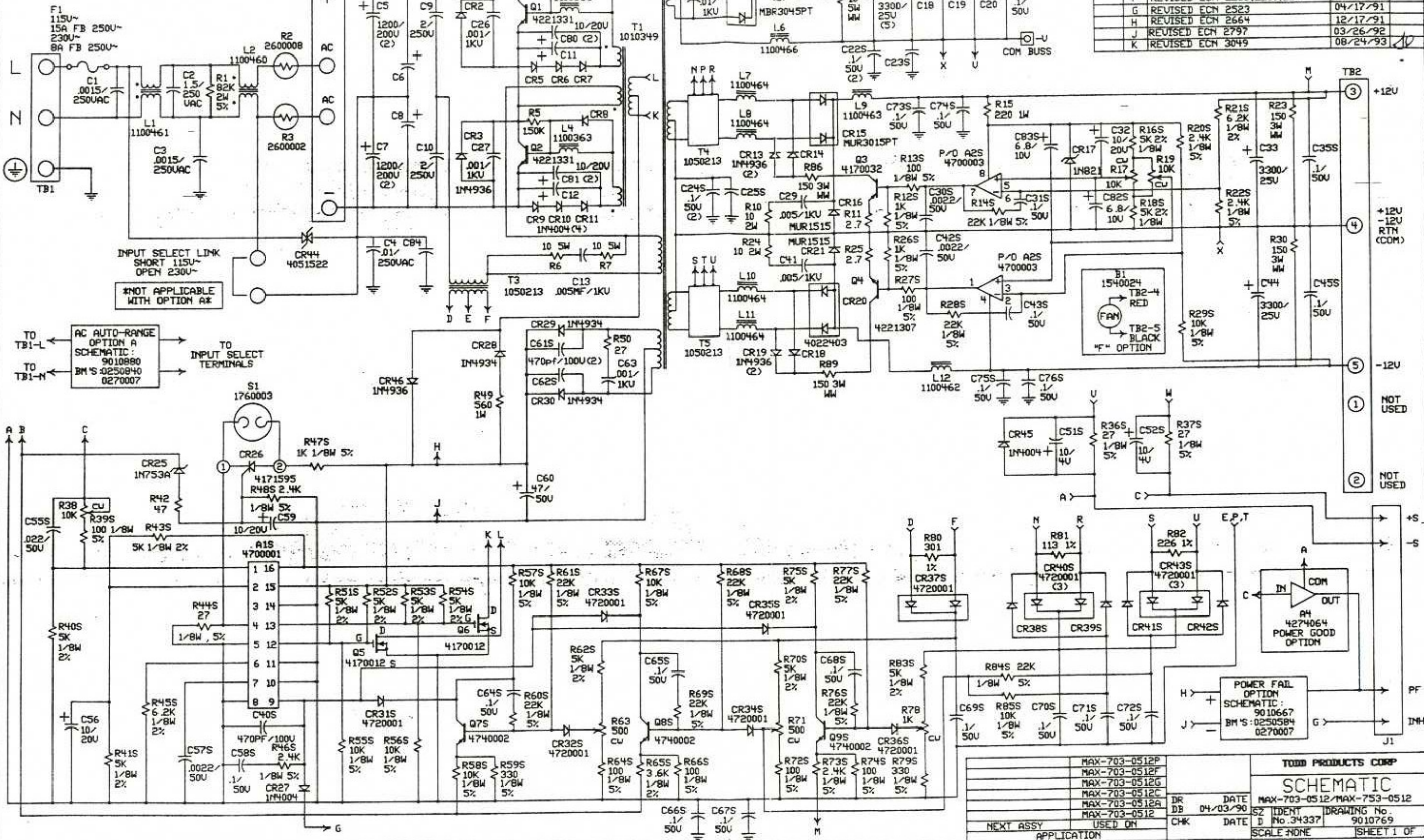
AC INPUT IN NORTH AMERICA
 115VAC 230VAC
 L=LINE L=LINE 1
 N=NEUTRAL N=LINE 2
 Ⓢ=SAFETY GND Ⓢ=SAFETY GND

INPUT RATINGS:
 115/230V~ 8/4A 50-60Hz

TODD PRODUCTS CORP.			MODEL		FINAL ASSY		SC5-50		BATCH QTY	BATCH NO.
SHEET	OF	2	B/M NC	ISSUE D	DATE 11-14-91	MATERIAL ISSUE	DATE REQ'D	DATE ISSUED	SUPV	
DEPT	SHEETS		BY DB	APP'D E.E.	M.E.	DATE REL.	PROO. CONT APP'Y	BY	DATE	DATE POSTED
LINE NO.	PART NO.	ISS.	DWG. SIZE	DESCRIPTION		ECN	QTY PER UNIT ACC	F.S.	BUY	SPACING F S
1	0250732			COMP BD ASSY						
2										
3										
4	6010220			CHASSIS - FAB						
5	7800007			SPACER, BUSHING						
6	6710094			CHASSIS INSULATOR						
7	6770192			HOUSING 4 POS						
8										
9				SAFETY GND TO CHASSIS HDW						
10	7015002			SCREW # 6-32 x 1 1/16 LG PAN HD PH						
11	7700006			WASHER # 6 FLAT REDUCED OD						
12	7730002			WASHER # 6 SP/LK						
13										
14										
15										
16				CRI TO CHASSIS HDW						
17	7053002			SCREW # 4-40 x 5/8 LG 82° FH PH		1919				
18	7700005			WASHER # 4 FLAT R.O.D.		2529				
19	7730001			WASHER # 4 SP/LK		2529				
20	7500004			NUT-HEX # 4-40 X 3/16 A.F.		2529				
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

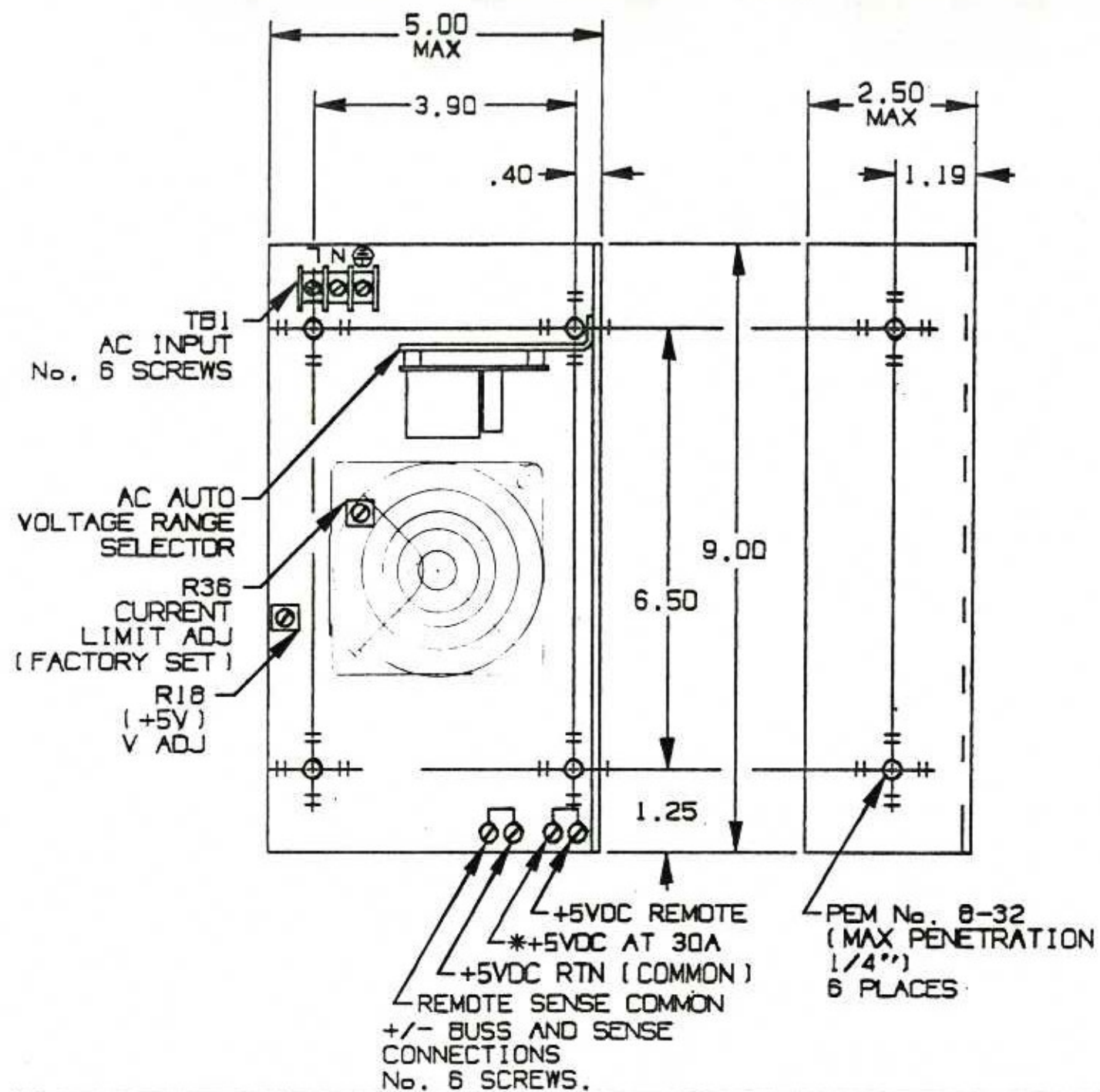
TODD PRODUCTS CORP.				MODEL				FINAL ASSY				SCS-50				BATCH		BATCH		
SHEET		2 OF 2		DEPT		SHEETS		B/M		NO.		960077		ISSUE		DATE		DATE		
2		2		DB		APP'D		E.E.		M.E.		11-14-91		11-14-91		DATE		DATE		
2		2		DB		APP'D		E.E.		M.E.		11-14-91		11-14-91		DATE		DATE		
2		2		DB		APP'D		E.E.		M.E.		11-14-91		11-14-91		DATE		DATE		
LINE NO.	PART NO.	ISS.	DWG. SIZE	DESCRIPTION										ECN	QTY PER UNIT		SPACING		DATE	
1															ACC	F.S.	BUY	F	S	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9	6710092			H.S. BUSS BAR TO CHASSIS																
10	7055014			INSULATOR - MICA																
11	77800015			SCREW # 6-32 x 1/2 LG. F.H. 82° PH										1919	1					
12	77000006			SHOULDER WASHER # 6											2					
13	77300002			WASHER # 6 FLAT R.O.D										2629	2					
14	75000005			WASHER # 6 SP/LK											2					
15				NUT - HEX # 6 - 32 x 1/4 A.F											2					
16																				
17	70132005			PC BOARD TO CHASSIS HDW																
18	77000005			SCREW # 4-40 x 7/16 LG PAN HD, PH											3					
19	77300001			WASHER # 4 FLAT REDUCED O.D.											3					
20				WASHER # 4 SP/LK											3					
21															-					
22	70550002			CHASSIS TO TSTR H.S. HDW																
23				SCREW # 6-32 x 7/16 LG, 82° FH, PH											2					
24	6830751			NAMEPLATE											1					
25				MARK MODEL SCS-50																
26				MARK INPUT 360																
27	9010783			SCHEMATIC - MAIN																
28																				
29																				
30																				

NOTE
UNLESS OTHERWISE SPECIFIED-
1) ALL RESISTORS ARE IN OHMS, 1/2 WATT, +/-10%
2) ALL CAPACITORS ARE IN MICROFARADS/VDC
3) REFERENCE DESIGNATIONS ENDING IN "S",
REPRESENT SURFACE MOUNT COMPONENTS.
4) J1-PF TERMINAL USED EITHER FOR
OPTION "PF" OR "G"



TODD MODEL SC5-30A
MAXIMUM POWER OUTPUT 150W

01/17/92



AC INPUT IN NORTH AMERICA
115VAC
L=LINE
N=NEUTRAL
⊕=SAFETY GND

230VAC
L=LINE 1
N=LINE 2
⊕=SAFETY GND

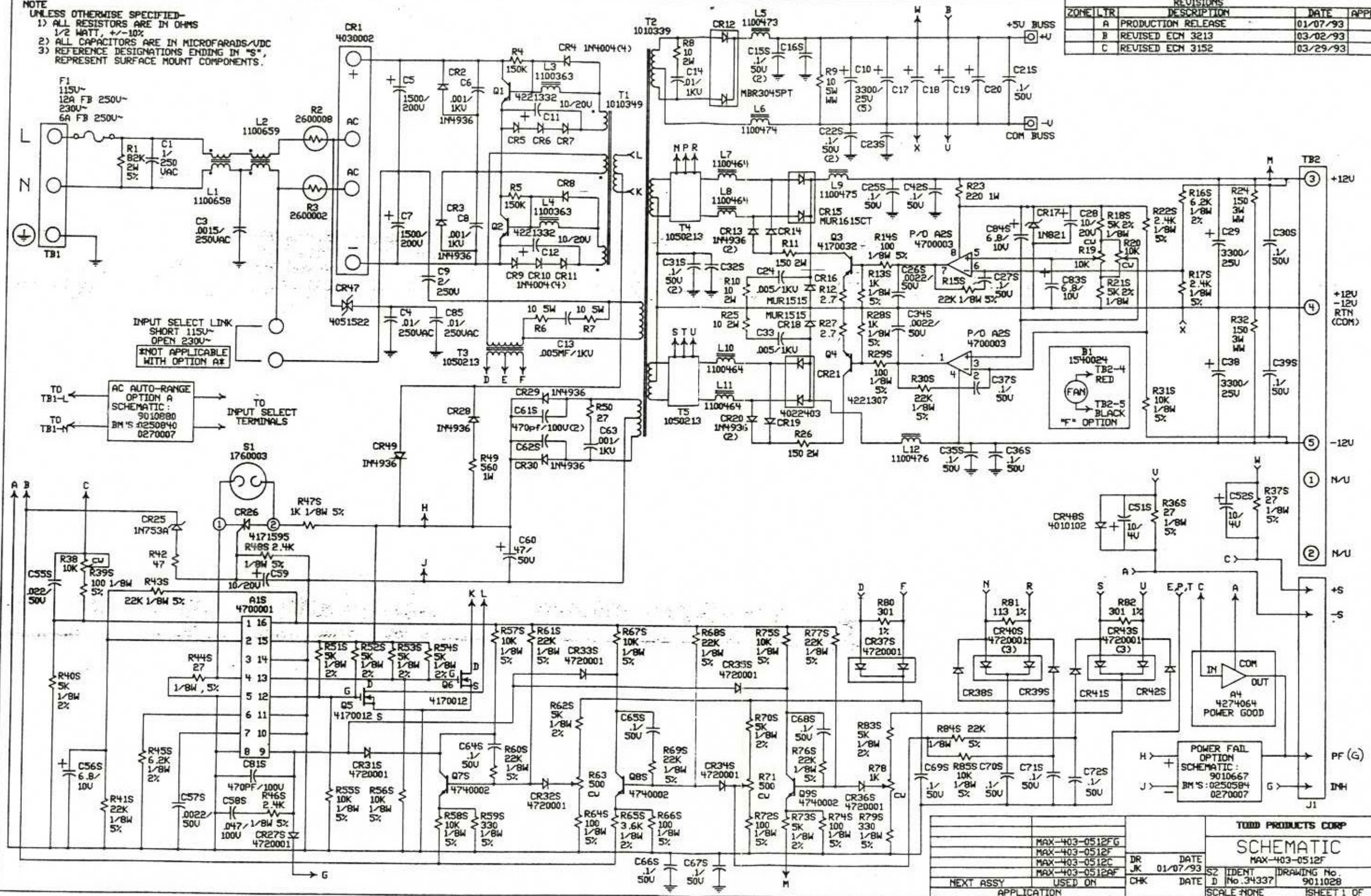
TODD PRODUCTS CORP.				MODEL FINAL ASSY SC 30				BATCH QTY		BATCH NO.		
SHEET	1	OF	2	B/M NC.	9600755	ISSUE A	DATE 7-9-87	MATERIAL ISSUE	DATE REQ'D	DATE ISSUED	SUP'V	
DEPT	SHEETS			BY	MA	APP'D	E.E.	M.E.	PROD. CONT. APP'Y	BY	DATE	DATE POSTED
LINE NO.	PART NO.	ISS.	DWG. SIZE	DESCRIPTION				ECN	QTY PER UNIT		NO. OF UNITS	TOTAL QTY
1	6010196			CHASSIS - FAB					ACC	F.S.	BUY	1
2	78000007			SPACER BUSHING							5	
3	67100084			INSULATOR, CHASSIS							1	
4												
5	0250721			COMP BOARD ASSY							1	
6				(P.C. BD TO CHASSIS HDW)								
7	70130005			SCREW #4-40X ⁷ / ₁₆ LG PAN HD, PH							2	
8	77000005			WASHER - #4 FLAT, REDUCED O.D.							2	
9	77300001			WASHER - #4 SPLIT LOCK							2	
10												
11												
12	17600003			THERMAL SWITCH W/ HDW							1	SI
13	70530004			SCREW #4-40X ³ / ₈ LG, FLAT HD, PH, 82°							2	
14	77300001			WASHER #4 SPLIT LOCK							2	
15	75000004			NUT, HEX #4-40X ³ / ₁₆ A.F.							2	
16												
17												
18				(DIODE TO CHASSIS HDW)								
19	70530002			SCREW - #4-40X ⁵ / ₈ LG FLAT HD, PH							1	
20	6510174			HEAT SINK PLATE							1	
21	77800028			INSULATOR, MICA							1	
22	77800029			INSULATOR, BUSHING							1	
23	77000005			WASHER - #4 FLAT, REDUCED O.D.							1	
24	77300001			WASHER - #4 SPLIT LOCK							1	
25	75000003			NUT, HEX - #4-40X ¹ / ₄ A.F.							1	
26												
27				SAFETY GND TO CHASSIS HDW								
28	70150002			SCREW #6-32X ⁷ / ₁₆ LG PAN HD, PH							1	
29	77000006			WASHER #6 FLAT							1	
30	77300002			WASHER #6 SP/LK							1	

TODD PRODUCTS CORP.			MODEL		FINAL ASSY		SC-30		BATCH QTY		BATCH NO.	
SHEET	2	OF 2	B/M NO.	9600755	ISSUE	A	DATE	7-9-87	MATERIAL	DATE REQ'D	DATE ISSUED	SUP'V
DEPT	SHEETS	ISS.	BY	MA	APP'D	EE	M.E.	DATE REL.	PROD. CONT.	BY	DATE	DATE POSTED
LINE NO.	PART NO.	DWG. SIZE	DESCRIPTION						ECN	QTY PER UNIT	NO OF UNITS	TOTAL QTY
1			(TSTR H.S. TO CHASSIS HDW)									
2	7055013		SCREW #6-32 X 3/4 FLAT HD, PH 82°								2	
3	6710071		INSULATOR - MICA								1	
4	7780032		WASHER #6 SHOULDER								2	
5	7800021		SPACER - UNTHD								2	
6	7700001		WASHER #6 FLAT								2	
7	7730002		WASHER #6 SPLIT LOCK								2	
8	7500005		NUT - HEX #6-32 X 1/4 A.F.								2	
9												
10												
11												
12	6830751		NAMEPLATE								1	
13			"MARK MODEL" SC5-30									
14			"MARK INPUT" 220									
15			SCHEMATIC								REF	
16	9010776											
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												

UNLESS OTHERWISE SPECIFIED-

- 1) ALL RESISTORS ARE IN OHMS
1/2 WATT, $\pm 10\%$
- 2) ALL CAPACITORS ARE IN MICROFARADS/VDC
- 3) REFERENCE DESIGNATIONS ENDING IN "S",
REPRESENT SURFACE MOUNT COMPONENTS.

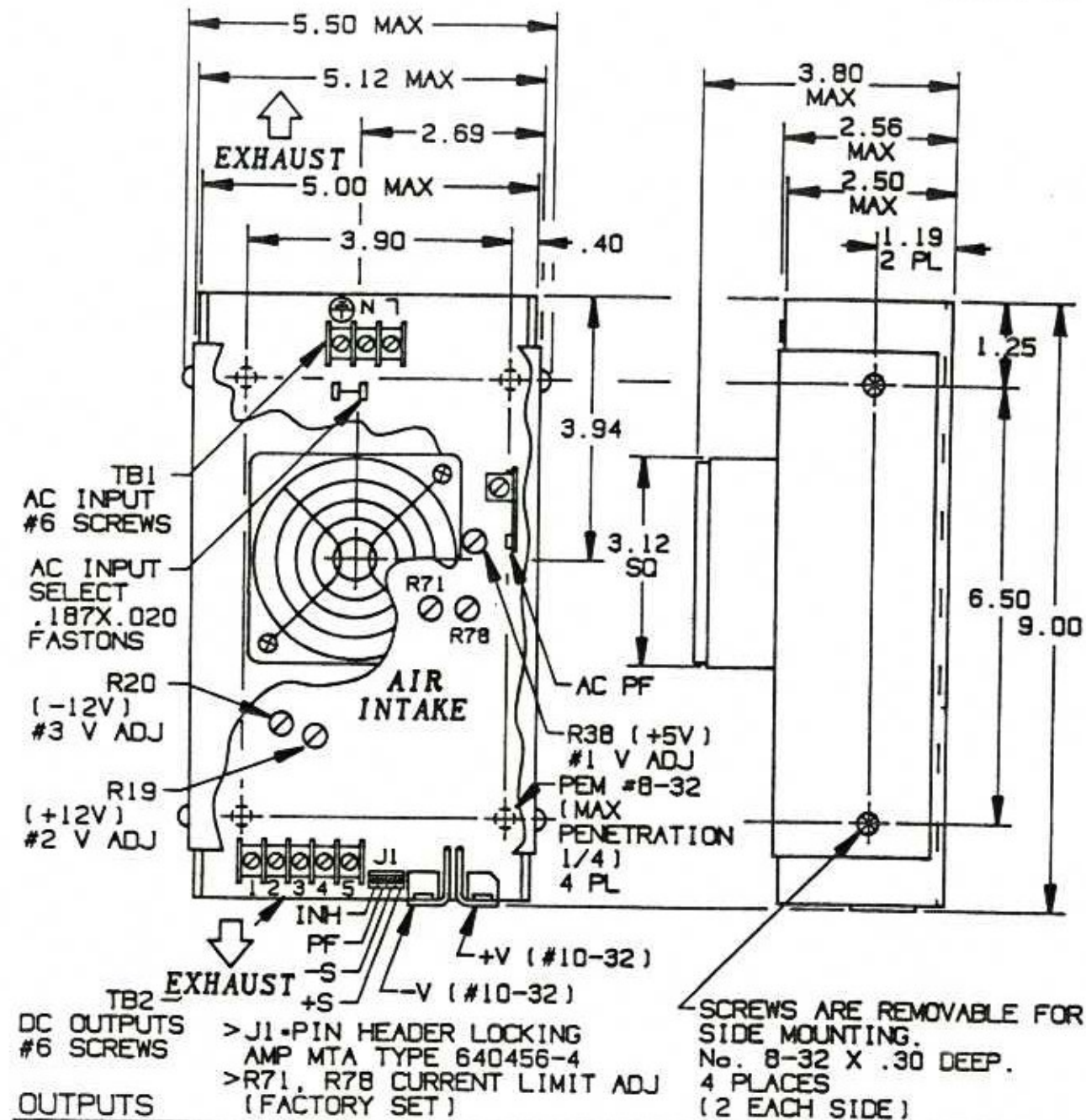
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APP
	A	PRODUCTION RELEASE	01/07/93	
	B	REVISED ECM 3213	03/02/93	
	C	REVISED ECM 3152	03/29/93	



SCHEMATIC

	MAX-403-0512FG		
	MAX-403-0512F	DR	DATE
	MAX-403-0512C	JK	01/07/93
	MAX-403-0512AF		
NEXT ASSY	USED ON	CHK	DATE
APPLICATION			

TODD MODEL MAX-353-0512FP
 MAXIMUM POWER OUTPUT 350 WATTS 08/01/89



OUTPUTS
 +V=+5VDC AT 50A (LEVEL 5)
 -V=+5VDC RTN (COMMON)
 TB2-1 NOT USED
 TB2-2 NOT USED
 TB2-3 +12VDC AT 8A AVG,
 12A PK (LEVEL 3)
 TB2-4 ±12VDC RTN (COMMON)
 TB2-5 -12VDC AT 4A (LEVEL 3)

AC INPUT IN NORTH AMERICA
 115VAC 230VAC
 L=LINE L=LINE 1
 N=NEUTRAL N=LINE 2
 ⊕=SAFETY GND ⊕=SAFETY GND
 UNIT IS LEVEL 6 PER CSA
 BULLETIN 1402 A/B/C

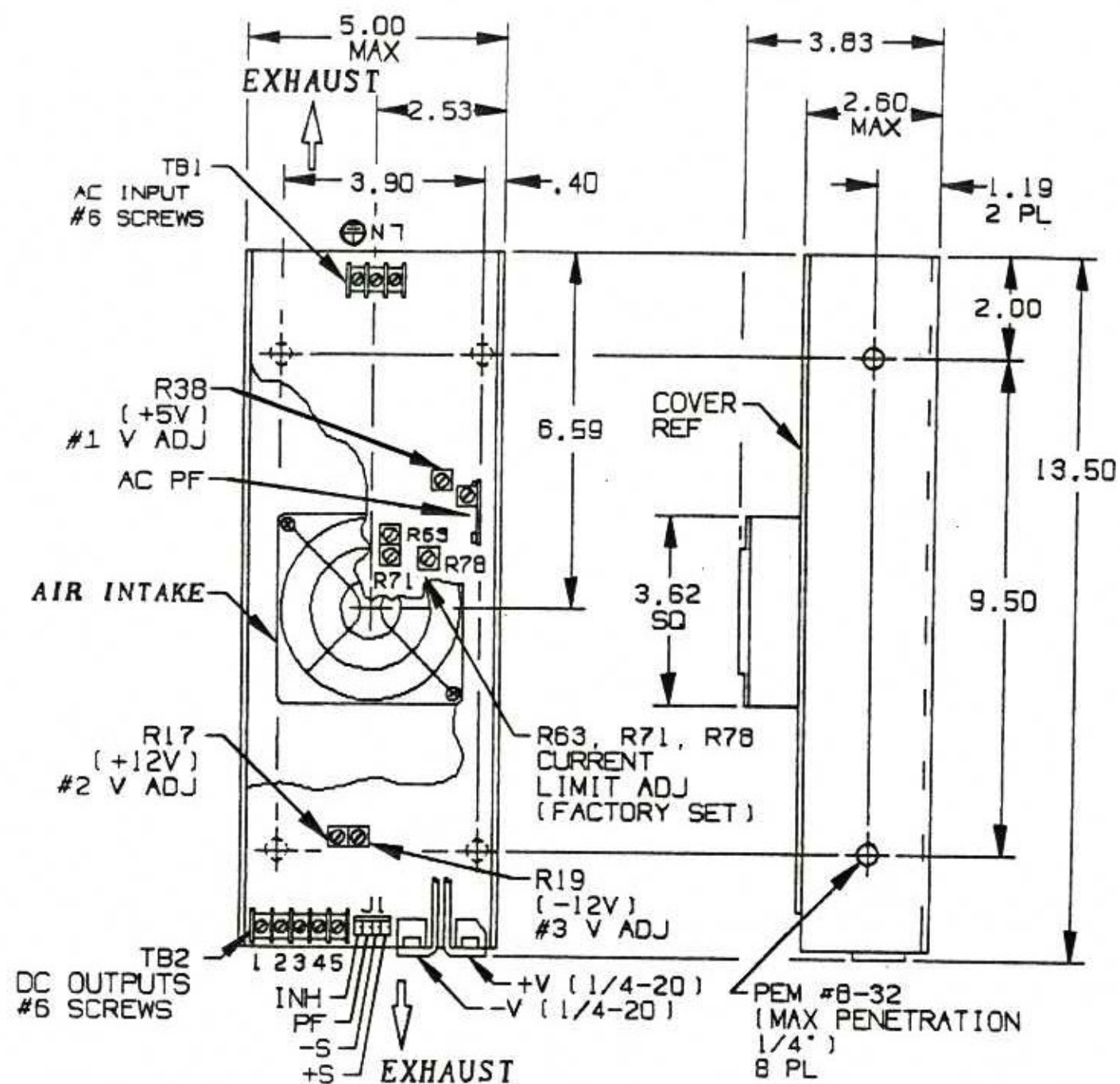
TODD PRODUCTS CORP.			MODEL		FINAL ASSY MAX-35-0512A		BATCH QTY		BATCH NO.		
SHEET	1	OF	3	B/M NO.	9601215	ISSUE A	DATE 2-16-93	MATERIAL	DATE REC'D	DATE ISSUED	SUPV
DEPT	SHEETS		1	APP'D	E.E.	M.E.	DATE REL.	PROD. CONT	BY	DATE	DATE POSTED
LINE NO.	PART NO.	ISS.	QWG. SIZE	DESCRIPTION				QTY PER UNIT	SPACING		
								ACC'T.S.	BUY	F	S
1	0251081			COMP BD ASSY					1		
2											
3											
4	6010220			CHASSIS - FAB					1		
5	7800001			SPACER, BUSHING					A		
6	6710094			CHASSIS INSULATOR					1		
7	6710192			HOUSING APOS					1		
8											
9											
10	7013005			PC BD TO CHASSIS HDW							
11	7700005			SCREW #4-40x1 1/16 LG, PAN HD, PH					3		
12	7730001			WASHER #4 FLAT REDUCED OD					3		
13				WASHER #4 SP/LK					3		
14											
15				CRI TO CHASSIS HDW							
16											
17	7053002			SCREW #4-40x3/8 LG, 82°FH, PH					1		
18	7700005			WASHER #4 FLAT R.O.D.					1		
19	7730001			WASHER #4 SP/LK					1		
20	7500004			NUT-HEX #4-40x3/16 A.F.					1		
21											
22				Q3, CRI5, CRI6 TO CHASSIS							
23	7780022			INSULATOR - MICA					3		
24	7780020			SHOULDER WASHER #4					3		
25	7053004			SCREW #4-40x3/8 LG, 82°FH, PH					3		
26	7700005			WASHER #4 FLAT REDUCED OD					3		
27	7730001			WASHER #4 SP/LK					3		
28	7500004			NUT-HEX #4-40x3/16 A.F.					3		
29											
30											

TODD PRODUCTS CORP.				MODEL				BATCH QTY				BATCH NO			
SHEET 2 of 3		DWG. SHEETS.		FINAL ASSY MAX-353-0512A				DATE				DATE			
				B/M NC 7601215				ISSUE A				DATE 2-16-93			
				BY D.J.				APP'D E.E.				M.E.			
LINE NO	PART NO	ISS.	DWG. SIZE	DESCRIPTION				CCN	QTY PER UNIT		SPACING	MATERIAL		DATE	DATE POSTED
									ACC	F.S.	UNIT	F	S		
1				COVER TO CHASSIS HDW											
2	6210088			COVER - FAB							1				
3	1053008			SCREW #4 - 40x 7/16 LG, FH, 82° SL							2				
4															
5				COVER TO MAG AMP H.S.											
6	1053008			SCREW #4 - 40x 7/16 LG, FH, 82° SL							2				
7															
8				H.S. BUSS BAR TO CHASSIS											
9	6710092			INSULATOR - MICA											
10	1055014			SCREW #6 - 32x 1/2 LG, FH, 82° PH							1				
11	1180015			SHOULDER WASHER #6							2				
12	1100006			WASHER #6 FLAT RED O.D.							2				
13	1130002			WASHER #6 SP/LK							2				
14	1500005			NUT - HEX #6 - 32x 1/4 A.F							2				
15															
16				P.L.D TO CHASSIS GND											
17	1015002			SCREW #6 - 32x 7/16 LG, PH, HD PH							1				
18	1130002			WASHER #6 SP/LK							1				
19	1100006			WASHER #6 FLAT REDUCED OD							1				
20															
21															
22	6830155			NAMEPLATE							1				
23				MARK MODEL MAX-353-0512A											
24				MARK INPUT 775VA											
25	9010715			SCHEMATIC											
26	9010880			SCHEMATIC OPTION "A"										REF	
27				CHASSIS TO TEST H.S. HDW										REF	
28	1035002			SCREW #6 - 32x 7/16 82° FH, PH							2				
29															
30															

TOB PRODUCTS CORP.				MODEL FINAL ASSY				MAX-35_ 0512A				DATE QTY		DATE		DATE			
SHEET 3 of 3		DUPI		SHEETS		DATE		DATE		DATE		DATE		DATE		DATE			
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE			
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE			
DWG				ISS				SIZE				DATE				DATE			
PART NO.				DATE				DATE				DATE				DATE			
1				2				3				4				5			
6				7				8				9				10			
11				12				13				14				15			
16				17				18				19				20			
21				22				23				24				25			
26				27				28				29				30			
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51				52				53				54				55			
56				57				58				59				60			
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66				67				68				69				70			
71				72				73				74				75			
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171				172				173				174				175			
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206				207				208				209				210			
211				212				213				214				215			
216				217				218				219				220			
221				222				223				224				225			
226				227				228				229				230			
231				232				233				234				235			
236				237				238				239				240			
241				242				243				244				245			
246				247				248				249				250			
251				252				253				254				255			
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621				622				623				624				625			
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686				687				688				689				690			
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706				707				708				709				710			
711				712				713				714				715			
716				717				718				719				720			
721				722				723				724				725			
726				727				728				729				730			
731				732				733				734				735			
736				737				738				739				740			
741				742				743				744				745			
746				747				748				749				750			
751				752				753				754				755			
756				757				758				759				760			
761				762				763				764				765			
766				767				768				769				770			
771				772				773				774				775			
776				777				778				779				780			
781				782				783				784				785			
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801				802				803				804				805			
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816				817				818				819				820			
821				822				823				824				825			
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836				837				838				839				840			
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846				847				848				849				850			
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861				862				863				864				865			
866				867				868				869				870			
871				872				873				874				875			
876				877				878				879				880			
881				882				883				884				885			
886				887				888				889				890			
891				8															

TODD MODEL MAX-753-0512AFP
 MAXIMUM POWER OUTPUT 750 WATTS

04/20/92



OUTPUTS

+V=+5VDC AT 120 (LEVEL 5)
 -V=+5VDC RTN (COMMON)
 TB2-1 NOT USED
 TB2-2 NOT USED
 TB2-3 +12VDC AT 12A AVG,
 20A PK (LEVEL 3)
 TB2-4 +12VDC & -12VDC RTN (COMMON)
 TB2-5 -12VDC AT 10A (LEVEL 3)
 UNIT IS LEVEL 6 PER CSA
 BULLETIN 1402 A/B/C

AC INPUT IN NORTH AMERICA
 115VAC 230VAC
 L=LINE L=LINE 1
 N=NEUTRAL N=LINE 2
 ⊕=SAFETY GND ⊕=SAFETY GND

NOTE: THIS UNIT HAS AC AUTORANGE
 VOLTAGE SELECTOR: AUTOMATICALLY
 SELECTS PROPER AC LINE VOLTAGE
 RANGE TO ENABLE OPERATION AT
 115VAC OR 230VAC.

TC PRODUCTS CORP.				MODEL FINAL ASSY AX753-0512				BATCH QTY		BATCH NO.							
SHEET 1		OF 3		B/M NC. 9600787		ISSUE C		DATE 7-13-92		MATERIAL ISSUE		DATE REC'D		DATE ISSUED		SUP'Y	
DEPT		SHEETS		BY J		APP'D E.E.		M.E.		DATE REL.		PROD. CONT APPY		BY		DATE	
LINE NO.	PART NO.	ISS.	DWG. SIZE	DESCRIPTION				ECN	QTY PER UNIT			SPACING					
									ACC	F.S.	BUY	F	S				
1	6010219			CHASSIS-FAB							1						
2	78000007			SPACER, BUSHING							4						
3	6710091			INSULATOR, CHASSIS							1						
4																	
5	6770192			HOUSING, 4 POS							1						
6																	
7	0250711			COMP BD ASSY							1						
8				PC BD SAFETY GND TO CHASSIS													
9	7015002			SCREW #6-32x7/16 LG, PAN HD, PH							1						
10	77000006			WASHER #6 FLAT REDUCED O.D.							1						
11	77300002			WASHER #6 SP/LK							1						
12				PC BD TO CHASSIS HDW													
13	70130005			SCREW #4-40x7/16 LG, PAN HD, PH							5						
14	77000005			WASHER #4 FLAT REDUCED O.D.							5						
15	77300001			WASHER #4 SP/LK							5						
16																	
17																	
18																	
19				CRI TO CHASSIS HDW													
20	7055004			SCREW #6-32x7/8 LG, 82° F.H., PH							1						
21	77000001			WASHER #6 FLAT							1						
22	77300002			WASHER #6 SP/LK							1						
23	75000005			NUT-HEX #6-32 x 1/4 A.F.							1						
24				CRI2 TO CHASSIS HDW													
25	7055014			SCREW #6-32x1/2 LG, 82° F.H., PH				2939			2						
26	7055003			SCREW #6-32x5/8 LG, 82° F.H., PH				2939			2						
27	6710096			INSULATOR, MICA													
28	6610206			NUT PLATE							1						
29	5150041			SLEEVEING				2503			2						
30	5150040			SLEEVEING				2503			2						

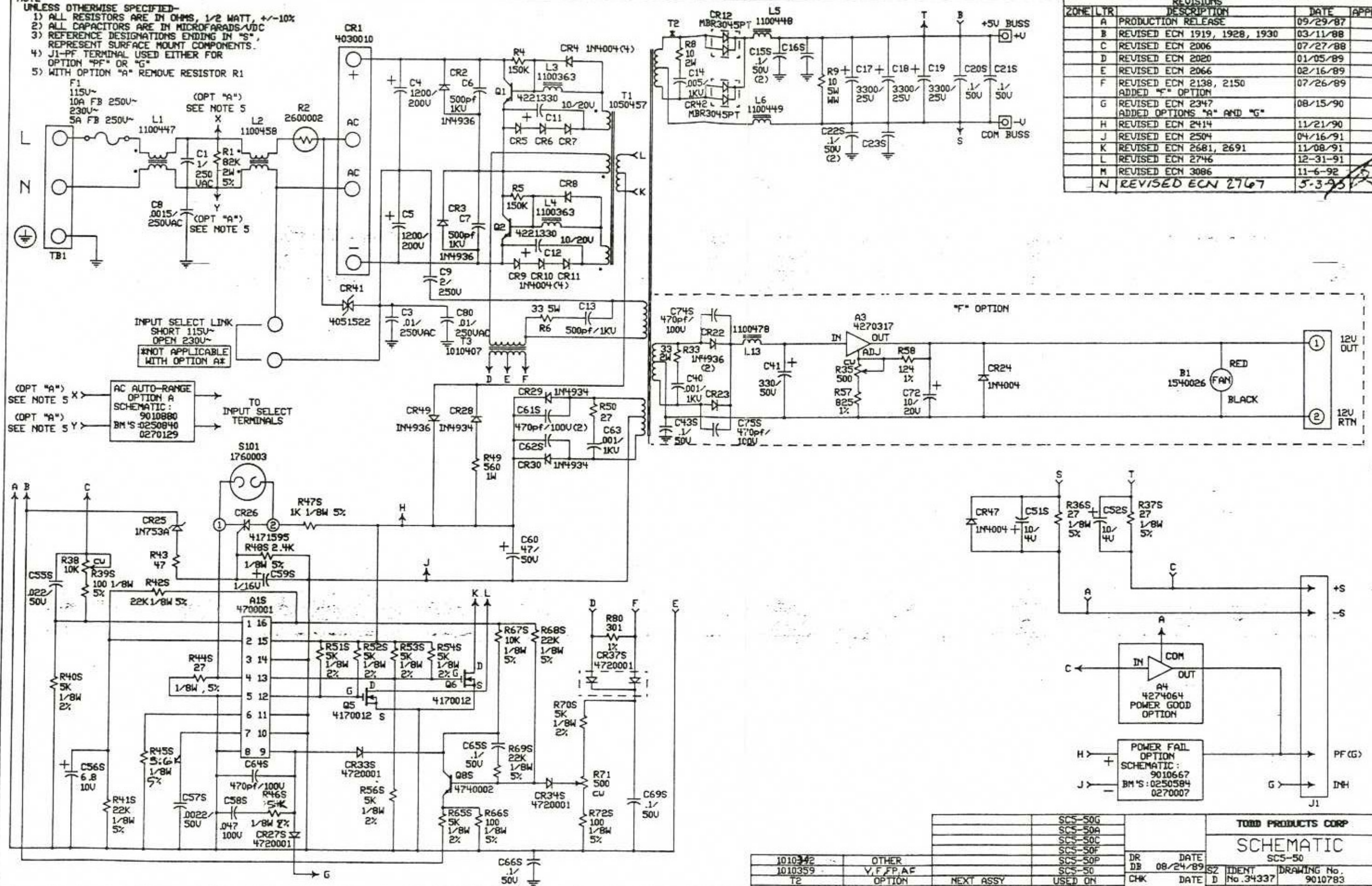
T.C. D PRODUCTS CORP.		MODEL/FINAL ASSY. X-753-0512		BATCH QTY		BATCH NO.	
SHEET 2	OF 3	B/M NO. 9600787	ISSUE C	DATE 7-13-92	MATERIAL ISSUE	DATE REQ'D	DATE ISSUED
DEPT	SHEETS	BY J	APP'D E.E.	M.E.	PROD. CONT APP'Y	BY	SUP'Y
LINE NO.	PART NO.	ISS. SIZE	DESCRIPTION	ECN	QTY PER UNIT	SPACING	DATE POST
					ACC	F.S. BUY	
					F	S	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10	7015008		CRI2 TO T2 LUGS HDW				
11	5230001		SCREW #6-32x5/16LG, PAN HD, PH				
12	7500005		SOLDER LUG #6		2		
13			NUT-HEX #6-32x1/4 A.F.		2		
14					2		
15							
16							
17							
18							
19							
20							
21	7780022		Q3, CRI6 TO CHASSIS HDW				
22	7780020		INSULATOR, MICA TO220				
23	7053004		SHOULDER WASHER #4		2		
24	7700005		SCREW #4-40x3/8LG, 82° FH, PH		2		
25	7730001		WASHER #4 FLAT REDUCED O.D.		2		
26	7500004		WASHER #4 SP/LK		2		
27			NUT-HEX #4-40x3/16 AF		2		
28							
29							
30							

TOLU PRODUCTS CORP.			MODEL/FINAL ASSY/MAX-753-0512			BATCH QTY		BATCH NO.		
SHEET	3	OF 3	B/M NO.	9600787	ISSUE C	DATE 7-13-92	MATERIAL ISSUE	DATE REQ'D	DATE ISSUED	SUP'V
DEPT	SHEETS		APP'D	DATE REL.	PROD. CONT APP'Y	BY	DATE	DATE POSTED		
LINE NO.	PART NO.	ISS. SIZE	DESCRIPTION			ECN	QTY PER UNIT	SPACING		
							ACC	F.S.	BUY	F S
1			CRIS TO CHASSIS HDW							
2	6510174		H.S. PLATE						1	
3	7780028		INSULATOR, MICA						1	
4	7780029		INSULATOR, BUSHING						1	
5	7053002		SCREW #4-40x5/8LG, 82° F.H., PH						1	
6	7700005		WASHER #4 FLAT REDUCED O.D.						1	
7	7730001		WASHER #4 SP/LK						1	
8	7500003		NUT, HEX, #4-40x1/4 A.F.						1	
9										
10										
11										
12	0120003		FAN COVER ASSY TO CHASSIS HDW						1	
13	7055001		FAN COVER ASSY						1	
14			SCREW #6-32x3/8LG, 82° F.H., PH						4	
15										
16	7055001		COVER TO MAG AMP H.S. HDW						2	
17			SCREW #6-32x5/8LG, 82° F.H., PH						2	
18										
19	7055003		COVER, CHASSIS, XSTR H.S. HDW						2	
20			SCREW #6-32x5/8LG, 82° F.H., PH						2	
21										
22										
23	6830751		NAME PLATE						1	
24										
25			"MARK MODEL" MAX-753-0512							
26			"MARK INPUT" 1000							
27										
28	9010769		SCHEMATIC - MAIN							REF
29										
30										

NOTE

UNLESS OTHERWISE SPECIFIED-

- 1) ALL RESISTORS ARE IN OHMS, 1/2 WATT, +/-10%
- 2) ALL CAPACITORS ARE IN MICROFARADS/VDC
- 3) REFERENCE DESIGNATIONS ENDING IN "S", REPRESENT SURFACE MOUNT COMPONENTS.
- 4) J1-PF TERMINAL USED EITHER FOR OPTION "PF" OR "G"
- 5) WITH OPTION "A" REMOVE RESISTOR R1



04/20/92



AC INPUT IN NORTH AMERICA

115VAC	230VAC
L=LINE	L=LINE 1
N=NEUTRAL	N=LINE 2

=SAFETY GND =SAFETY GND

NOTE: THIS UNIT HAS AC AUTORANGE
VOLTAGE SELECTOR: AUTOMATICALLY
SELECTS PROPER AC LINE VOLTAGE
RANGE TO ENABLE OPERATION AT
115VAC OR 230VAC.

UNIT IS LEVEL 6 PER CSA
BULLETIN 1402 A/B/C

TOL PRODUCTS CORP.			MODEL FINAL ASSY X.703-0512			BATCH QTY		BATCH NO.	
SHEET 1	OF 3	B/M MC	9600745	ISSUE E	DATE 7-13-92	MATERIAL ISSUE	DATE REC'D	DATE ISSUED	SUP'V
DEPT	SHEETS	BY	APP'D	DATE REL.	PROD. CONT	BY	DATE	DATE POSH	
LINE NO	PART NO	ISS	DWG SIZE	DESCRIPTION	ECN	QTY PER UNIT	SPACING		
						ACC	F.S.	BUY	F S
1	6010219			CHASSIS-FAB				1	
2	78000007			SPACER, BUSHING				4	
3	67100091			INSULATOR, CHASSIS				1	
4									
5	6770192			HOUSING, 4 POS				1	
6									
7	0250711			COMP BD ASSY				1	
8				PC BD SAFETY GND TO CHASSIS					
9	70150002			SCREW #6-32x7/16 LG, PAN HD, PH				1	
10	77000006			WASHER #6 FLAT REDUCED OD				1	
11	77300002			WASHER #6 SP/LK				1	
12				PC BD TO CHASSIS HDW					
13	70130005			SCREW #4-40x7/16 LG, PAN HD, PH				5	
14	77000005			WASHER #4 FLAT REDUCED O.D.				5	
15	77300001			WASHER #4 SP/LK				5	
16									
17									
18				CRI TO CHASSIS HDW					
19					1974				
20	70550004			SCREW #6-32x7/8 LG, 82° F.H., PH				1	
21	77000001			WASHER #6 FLAT				1	
22	77300002			WASHER #6 SP/LK				1	
23	75000005			NUT-HEX #6-32 x 1/4 A.F.				1	
24				CRI TO CHASSIS HDW					
25	70550004			SCREW #6-32x7/8 LG, 82° F.H., PH	2279			2	
26	70550003			SCREW #6-32x5/8 FLAT HD, PH	2299			2	
27	51500041			SLEEVING	2563			2	.125
28	67100096			INSULATOR, MICA				1	
29	51500040			SLEEVING	2563			2	.250
30	610206			NUT PLATE	2563			2	

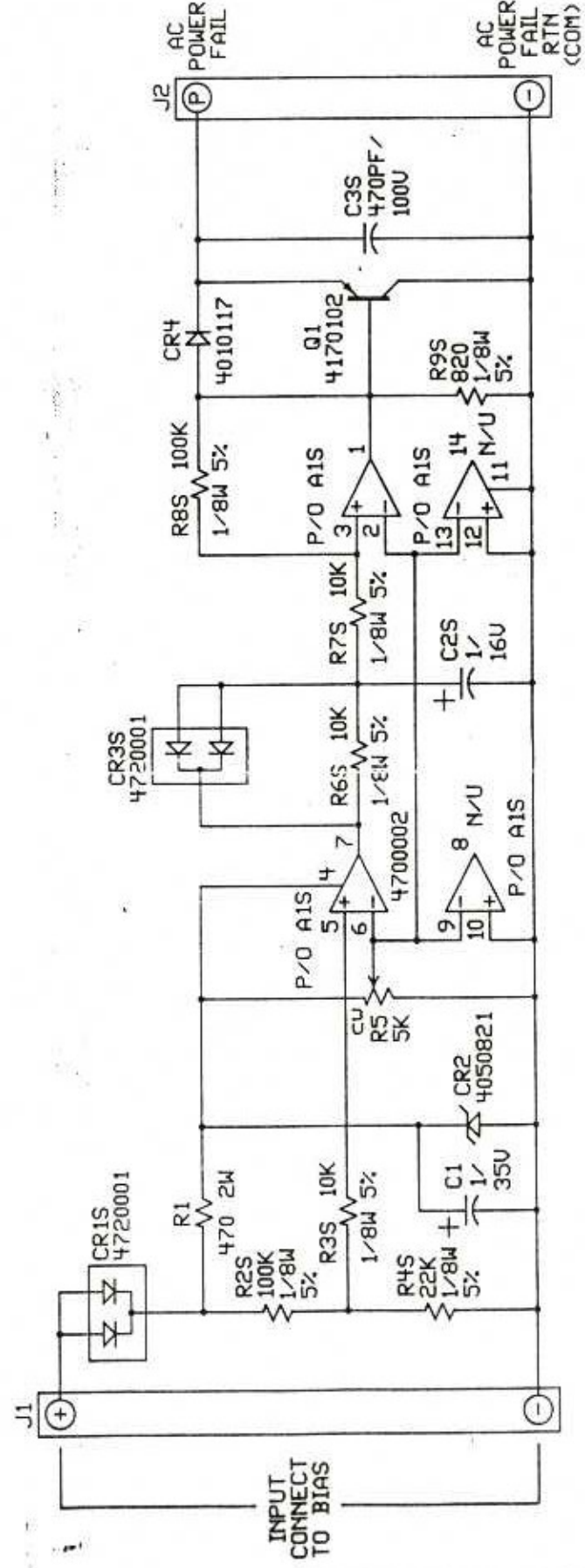
TODC PRODUCTS CORP.			MODEL/FINAL ASSY MA' 703-0512			BATCH QTY	BATCH NO.		
SHEET 2 OF 3	B/M NC.		9600745	ISSUE E	DATE 7-13-92	MATERIAL ISSUE	DATE REQ'D	DATE ISSUED	SUPV
DEPT SHEETS	BY J	APP'D	E.E.	M.E.	DATE REL.	PROD. CONT APPV	BY	DATE	DATE POSTED
LINE NO.	PART NO.	ISS.	DWG. SIZE	DESCRIPTION		ECN	QTY PER UNIT ACC F.S. BUY	SPACING F S	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10	7015008			CR12 TO T2 LUGS HDW					
11	5230001			SCREW #6-32x5/16LG, PAN HD PH					
12	7500005			SOLDER LUG #6					
13				NUT-HEX #6-32x1/4 A.F.					
14									
15									
16						2027			
17						2027			
18									
19									
20									
21	7780022			Q3, CR16 TO CHASSIS HDW					
22	7780020			INSULATOR, MICA T0220					
23	7053004			SHOULDER WASHER #4					
24	7700005			SCREW #4-40x3/8 LG, 82° FH., PH					
25	7730001			WASHER #4 FLAT REDUCED O.D.					
26	7500004			WASHER #4 SP/LK					
27				NUT-HEX #4-40 x 3/16 AF					
28									
29									
30									

TOC PRODUCTS CORP.			MODEL FINAL ASSY MP-703-0512			BATCH QTY	BATCH NO.
SHEET	3 OF 3	B/M NO	9600745	DATE REL	DATE REC'D	DATE ISSUED	SUP'V
DEPT	SHEETS	BY	APP'D	DATE REL	DATE REC'D	DATE ISSUED	SUP'V
LINE NO.	PART NO	ISS	DWG SIZE	DESCRIPTION	ECH	QTY PER UNIT	SPACING
						ACC F S BUY	F S
1				CRIS TO CHASSIS HDW			
2	6510174			H.S. PLATE		1	
3	7780028			INSULATOR, MICA		1	
4	7780029			INSULATOR, BUSHING		1	
5	7053002			SCREW #4-40 x 5/8 LG, 82° F.H., PH		1	
6	7700005			WASHER #4 FLAT REDUCED O.D.		1	
7	7730001			WASHER #4 SP/LK		1	
8	7500003			NUT, HEX, #4-40 x 1/4 A.F.		1	
9				COVER TO CHASSIS HDW			
10	62300018			COVER - FINISHED		1	
11	6970895			COVER - SCREEN		1	
12	6210085			COVER - FAB		1	
13	7055001			SCREW #6-32 x 3/8 LG, 82° F.H., PH		4	
14							
15				COVER TO MAG AMP H.S. HDW			
16	7055001			SCREW #6-32 x 3/8 LG, 82° F.H., PH		2	
17							
18				COVER, CHASSIS, XSTR H.S. HDW			
19	7055003			SCREW #6-32 x 5/8 LG, 82° F.H., PH		2	
20							
21							
22							
23	6830751			NAME PLATE		1	
24				"MARK MODEL" MAX-703-0512			
25				"MARK INPUT" .950			
26							
27							
28	9010769			SCHEMATIC - MAIN			REF
29							
30							

TOL PRODUCTS CORP.				MODEL PC BD ASSY.PV				FAIL BD				BATCH NO.		
SHEET		OF		B/M NC.		SURFACE MOUNTED		DATE		DATE		DATE		
DEPT		SHEETS		APP'D		E.E		M.E		DATE		DATE		
LINE NO.	PART NO.	ISS.	DWG. SIZE	DESCRIPTION				ECN	QTY PER UNIT		SPACING		DATE	
									ACC	F.S.	BUY	F	S	
1	0270007			SURFACE MOUNTED ASSY							1			
2														
3														
4														
5	3100002			CAP 1MF/35V					(1)		1		.2	C1
6														
7														
8	4050821			DIODE ZENER (6.2V)					(2)		1		.4	CR2
9	4010117			DIODE					(3)		1		.4	CR4
10														
11														
12	4170102			XSTR NTE102A				186A	(4)		1			Q1
13														
14														
15	2154478			RCOMP 470Ω, 2W					(5)		1		.8	R1
16														
17														
18	2010019			POT 5KΩ					(6)		1			- R5
19														
20														
21	6770257			CONNECTOR, 2 PINS							2			
22														
23														
24														
25														
26														
27														
28														
29														
30														

NOTE HERWISE SPECIFIED-
UNLESS
1) ALL RESISTORS ARE IN OHMS
1/2 WATT, +/-10%
2) ALL CAPACITORS ARE IN MICROFARADS/UDC
3) REFERENCE DESIGNATIONS ENDING IN "S",
REPRESENT SURFACE MOUNT COMPONENTS.

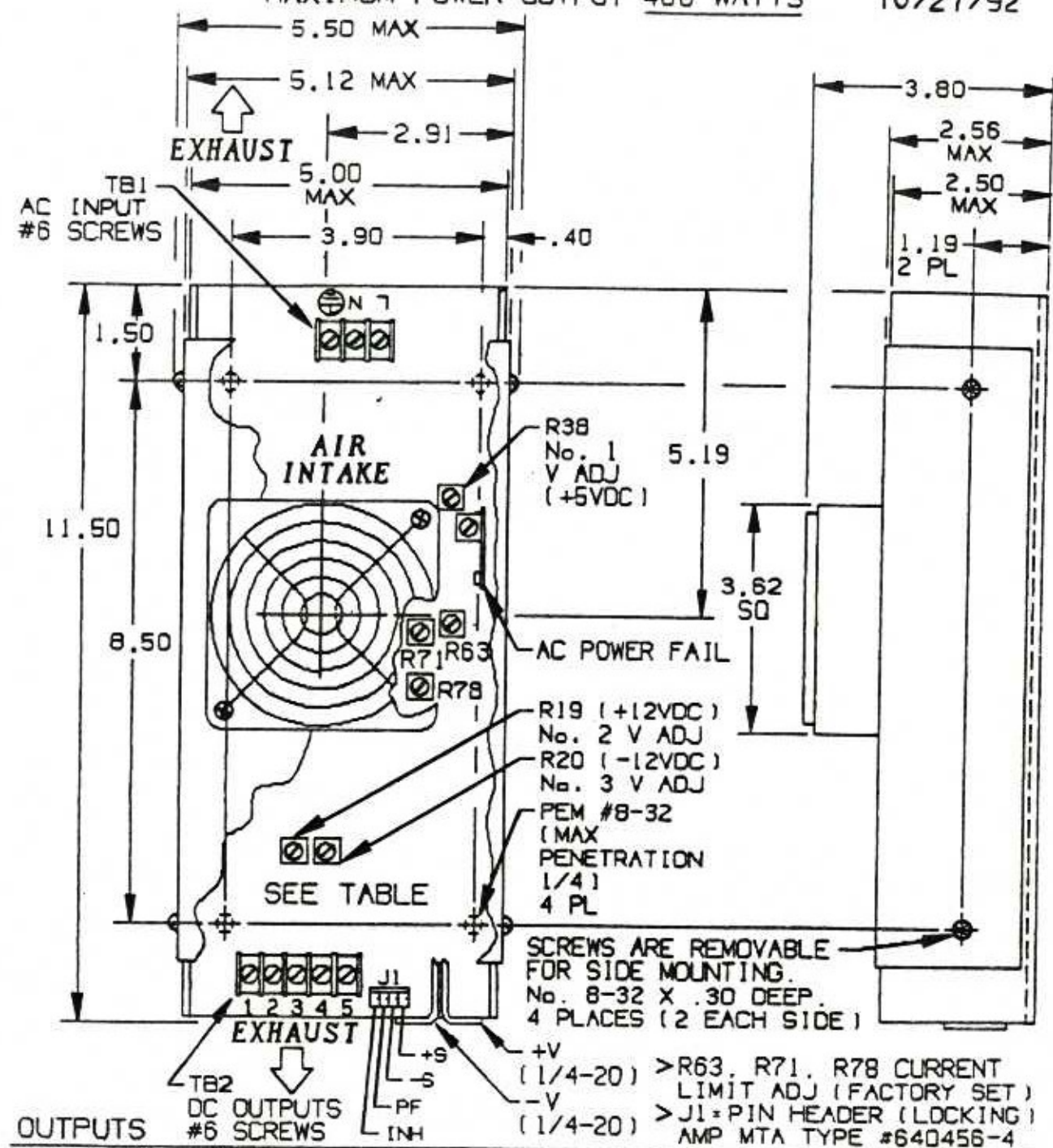
REVISIONS		
ZONE/LTR	DESCRIPTION	DATE
01	PROTOTYPE RELEASE	03/21/85
A	PRODUCTION RELEASE	03/21/85
B	REVISED ECN 1771	02/19/86
C	REVISED ECN 1780	04/11/86
D	REVISED ECN 1869	10/06/87



TODD PRODUCTS CORP	
SCHEMATIC	
DR JK	DATE 02/03/90
CHK	DATE
NEXT ASSY USED ON	
APPLICATION	
SZ IDENT B No. 34337	DRAWING No. 9010667
SCALE: NONE	SHEET 1 OF 1

TODD MODEL MAX-403-0512AFP
MAXIMUM POWER OUTPUT 400 WATTS

10/27/92

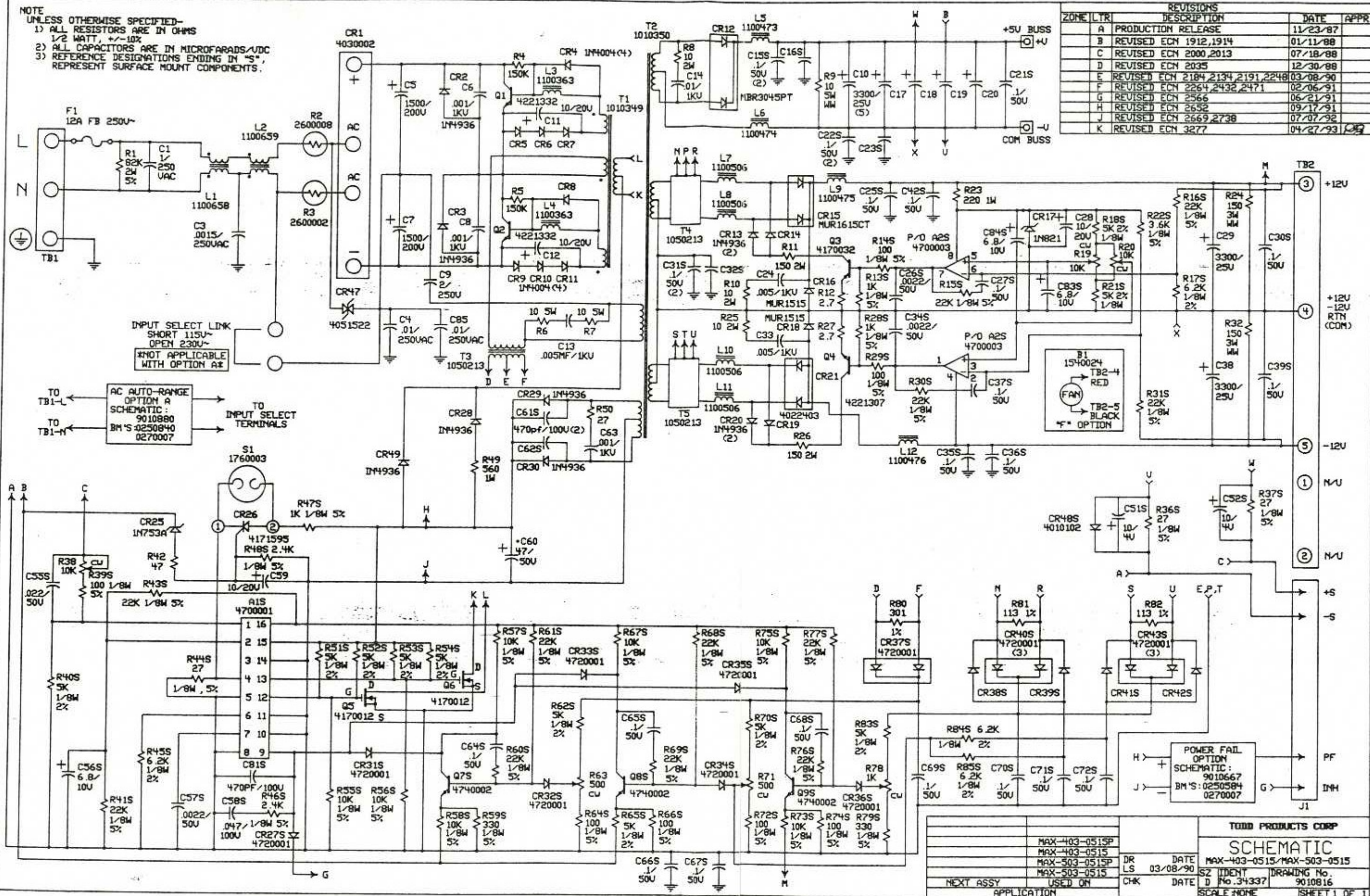


OUTPUTS
TB2-1 NOT USED
TB2-2 NOT USED
TB2-3 +12VDC AT 10A AVG/16A PK
TB2-4 ±12VDC RTN (COMMON)
TB2-5 -12VDC AT 6.0A

NOTE:
THIS UNIT HAS AC AUTORANGE VOLTAGE
SELECTOR: AUTOMATICALLY SELECTS
PROPER AC LINE VOLTAGE RANGE TO
ENABLE POWER OPERATION AT EITHER
115VAC OR 230VAC

+V +5VDC AT 70A
-V COMMON
AC INPUT IN NORTH AMERICA
115VAC 230VAC
L=LINE 1 L=LINE 1
N=NEUTRAL N=LINE 2
⊕=SAFETY GND ⊕=SAFETY GND

- NOTE
UNLESS OTHERWISE SPECIFIED-
1) ALL RESISTORS ARE IN OHMS
1/2 WATT, +/-10%
2) ALL CAPACITORS ARE IN MICROFARADS/VDC
3) REFERENCE DESIGNATIONS ENDING IN "S",
REPRESENT SURFACE MOUNT COMPONENTS.



ZONE	LTR	DESCRIPTION	DATE	APPR
A		PRODUCTION RELEASE	11/23/87	
B		REVISED ECN 1912,1914	01/11/88	
C		REVISED ECN 2000,2013	07/18/88	
D		REVISED ECN 2035	12/30/88	
E		REVISED ECN 2184,2134,2191,2248	03/08/90	
F		REVISED ECN 2264,2432,2471	02/06/91	
G		REVISED ECN 2566	06/21/91	
H		REVISED ECN 2652	09/17/91	
J		REVISED ECN 2669,2738	07/07/92	
K		REVISED ECN 3277	04/27/93	

MAX-403-0515P		DATE		MAX-403-0515/MAX-503-0515	
MAX-403-0515		LS		03/08/90	
MAX-503-0515P		CHK		DATE	
MAX-503-0515		USED ON		D No. 34337	
NEXT ASSY		APPLICATION		SCALE NONE	
				SHEET 1 OF 1	

TODD PIPEDUCTS CORP.				MODEL FINAL ASSY MAX-403-01-12				BATCH QTY		BATCH NO.			
SHEET	2	OF	3	B/M NO.	9601177	ISSUE B	DATE 3-29-73	MATERIAL ISSUE	DATE REQ'D	DATE ISSUED	SUP'V		
DEPT				BY D.J.				PROG. CONT.				DATE	
SHEETS				APP'D				BY				DATE POSTED	
LINE NO.	PART NO.	ISS.	DWG SIZE	DESCRIPTION				ECN	QTY PER UNIT		SPACING		
								ACC	F.S.	BUY	F	S	
1				CR12 TO CHASSIS HDW.									
2	5150047			SLEEVEING									
3	7055003			SCREW #6-32x5/8 LG. FLAT HD.PH						2	.125		
4	6710096			INSULATOR, MICA						2			
5	5150040			SLEEVEING						1			
6	6610206			NUT PLATE						2	.250		
7	7055014			SCREW #6-32x1/2 LG. FH. PH						2			
8				CR12 TO T2 LUGS HDW						2			
9	7015008			SCREW #6-32x5/16 LG PAN HD. PH						2			
10	5230001			SOLDER LUG						2			
11	7500005			NUT-HEX #6-32x1/4 AF						2			
12													
13				CR12 BUSS BAR TO L3 LUG HDW									
14	7750003			LOCK WASHER, #10 EXT TOOTH						1			
15	7500006			NUT-HEX #10-32x3/8 A.F						1			
16													
17				Q3,CR15,CR16 TO CHASSIS HDW									
18	7780022			INSULATOR, MICA TOZZO						3			
19	7780020			SHOULDER WASHER #4						3			
20	7053004			SCREW #4-40x3/8 LG. 82° FH. PH						3			
21	7700005			WASHER #4 FLAT REDUCED O.D						3			
22	7730001			WASHER #4 SPLK						3			
23	7500004			NUT-HEX #4-40x3/16 AF						3			
24													
25				COVER TO MAG AMP HS HDW									
26	6210089			COVER - FAB						1			
27	7053008			SCREW #4-40x5/16 LG FLAT HD. PH						2			
28													
29				COVER TO CHASSIS HDW									
30	7053008			SCREW #4-40x5/16 LG FLAT 17° PH						2			

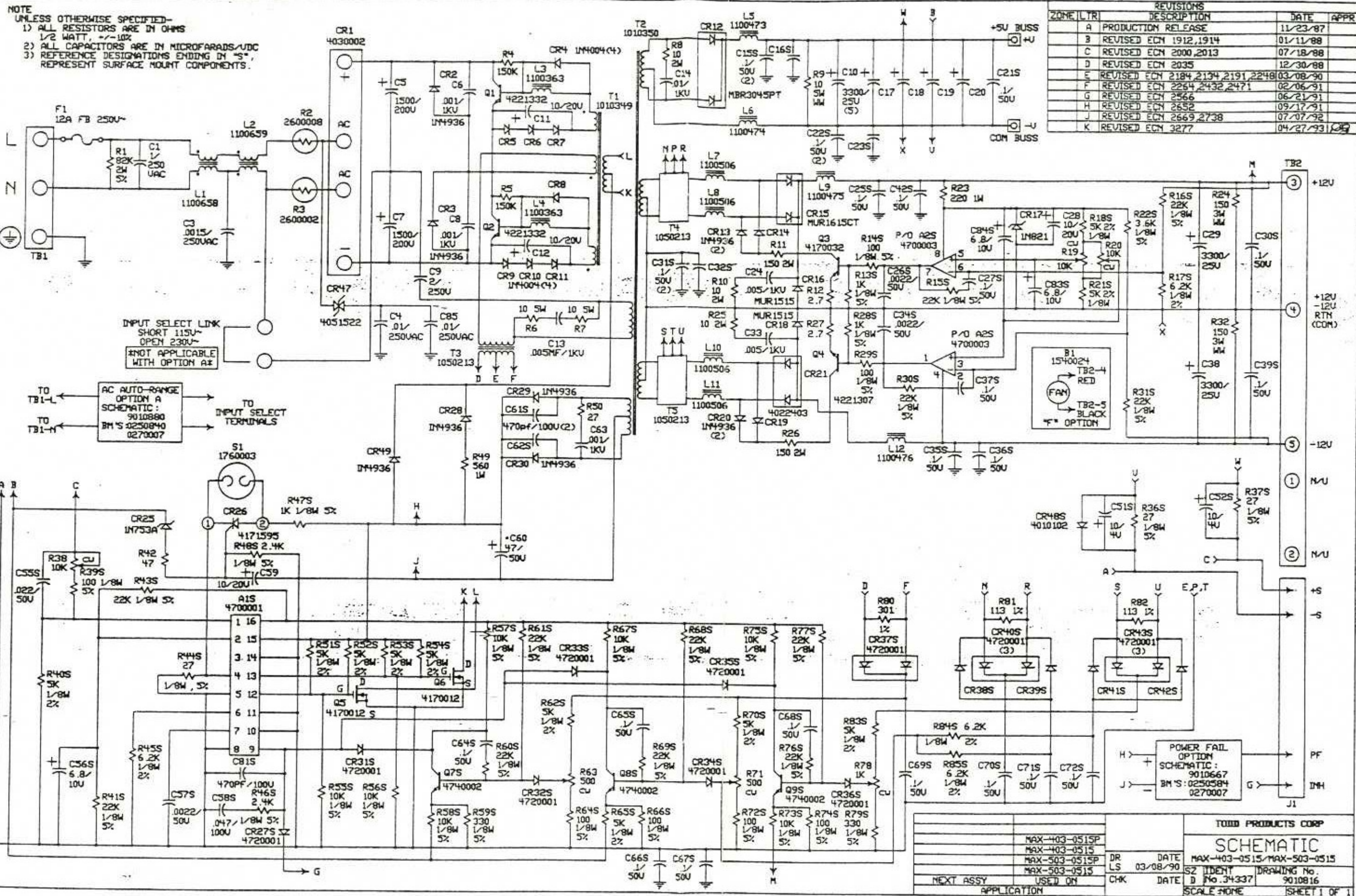
TODD P. DUCTS CORP.				MODEL FINAL ASSY MAX-403-0512C		BATCH QTY		BATCH NO.				
SHEET	3	OF	3	B/M NO.	9601177	ISSUE B	DATE 3-29-93	MATERIAL ISSUE	DATE REQ'D	DATE ISSUED	SUP'V	
DEPT	SHEETS			B:	D.J.	APP'D	E.E.	PROD. CONT APPV	BY	DATE	DATE POSTED	
LINE NO.	PART NO.	ISS.	DWG SIZE	DESCRIPTION				ECN	QTY PER. UNIT		SPACING	
								ACC	F.S.	BUY	F	S
1	6830751			NAMEPLATE						1		
2				"MARK MODEL" MAX-403-0512C								
3				"MARK INPUT" 9/4,5A								
4												
5												
6	9011028			SCHEMATIC - MAIN				3152				REF
7												
8												
9												
10												
11	7053008			THERMAL SWITCH TO CHASSIS HDW						2		
12	7730001			SCREW #4-40 X 5/16 LG 82° FH, PH						2		
13	7500004			WASHER #4 SP/LK						2		
14				NUT HEX #4-40 X 3/16 A.F.						2		
15	6230033			COVER FINISHED						1		
16	6971119			COVER SCREEN						REF		
17	6210098			COVER FAB						REF		
18	7016002			SCREW #8-32 X 5/16 LG PH. PH.						4		
19	7730003			WASHER #8 SP/LK						4		
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												

TODD PRODUCTS CORP.				MODEL				FINAL ASSY MTC-503-0515				BATCH QTY		BATCH NO.	
SHEET	1	OF	3	B/M NO.	9600807	ISSUE	E	DATE	4-27-93	MATERIAL	DATE REQ'D	DATE ISSUED	SUP'V		
DEPT	SHEETS			BY	DB	APP'D	EE	M.E.	DATE REL	PROO. CONT. APPY	BY	DATE	DATE POSTED		
LINE NO.	PART NO.	ISS. SIZE	DWG. SIZE	DESCRIPTION					ECN	QTY PER UNIT			SPACING		
1	6010225			CHASSIS - FAB						ACC	F.S.	BUY	F	S	
2	7800007			SPACER, BUSHING								1			
3	67100098			INSULATOR, CHASSIS								4			
4												1			
5	6770192			HOUSING, 4 POS								1			
6															
7	0250168			COMP BD ASSY								1			
8															
9															
10	7015002			PC BD SAFETY GND TO CHASSIS											
11	7700006			SCREW #6-32 x 7/16 LG, PAN HD, PH								1			
12	7730002			WASHER #6 FLAT REDUCED O.D								1			
13				WASHER #6 SP/LK								1			
14															
15	7013005			PC BD TO CHASSIS HDW								3			
16	7700005			SCREW #4-40 x 7/16 LG, PAN HD, PH								3			
17	7730001			WASHER #4 FLAT REDUCED O.D								3			
18				WASHER #4 SP/LK											
19															
20				CR1 TO CHASSIS HDW											
21	7053002			SCREW #4-40 x 5/8 LG, 82° FH, PH					2963			1			
22	7700005			WASHER #4 FLAT					2963			1			
23	7730001			WASHER #4 SP/LK					2963			1			
24	7500004			NUT HEX #4-40 x 3/16 A.F					2963			1			
25															
26				INVERTER XSTR H.S. TO CHASSIS											
27	7055002			SCREW #6-32 x 7/16 LG 82° FH, PH								2			
28															
29															
30															

TODD , RODUCTS CORP.				MODEL				BATCH				BATCH				
SHEET 2 OF 3				FINAL ASSY MTC-003-0515				QTY				MATERIAL				
DEPT SHEETS				B/M NO. 9600807				DATE				DATE				
				ISSUE E.E. M.E.				DATE REL				DATE				
				APP'D DB				DATE				DATE				
				DESCRIPTION				DATE				DATE				
LINE NO.	PART NO.	ISS.	DWG SIZE					ECN	QTY PER UNIT				SPACING			
									ACC	F.S.	BUY	F	S			
1				CR12 TO CHASSIS HDW.												
2	5150041			SLEEVEING				2562			2	.125				
3	7055003			SCREW #6-32x5/8 LG. FLAT HD PH				2963			2					
4	6710096			INSULATOR, MICA							1					
5	5150040			SLEEVEING				2562			2	.250				
6	6610206			NUT PLATE				2562			2					
7	7055014			SCREW #6-32x 1/2 LG FH PH				2963			2					
8				CR12 TO T2 LUGS HDW												
9	7015008			SCREW #6-32x5/16 LG PAN HD. PH							2					
10	5230001			SOLDER LUG							2					
11	7500005			NUT- HEX #6-32 x 1/4 AF							2					
12																
13				CR12 BUSS BAR TO L5 LUG HDW												
14	7750003			LOCKWASHER, #10 EXT TOOTH							1					
15	7500006			NUT- HEX #10-32 x 3/8 A.F							1					
16																
17				Q3, CR15, CR16 TO CHASSIS HDW												
18	7780022			INSULATOR, MICA TO220							3					
19	7780020			SHOULDER WASHER #4							3					
20	7053004			SCREW #4-40x3/8 LG, 82° F.H., PH							3					
21	7700005			WASHER #4 FLAT REDUCED O.D							3					
22	7730001			WASHER #4 SPLK							3					
23	7500004			NUT- HEX #4-40 x 3/16 AF							3					
24																
25				COVER TO MAG AMP HS HDW												
26	6210089			COVER - FAB							1					
27	7053008			SCREW #4-40x5/16 LG FLAT HD. PH				2012			2					
28																
29				COVER TO CHASSIS HDW												
30	7053008			SCREW #4-40 x 5/16 LG FLAT HD. PH				2012			2					

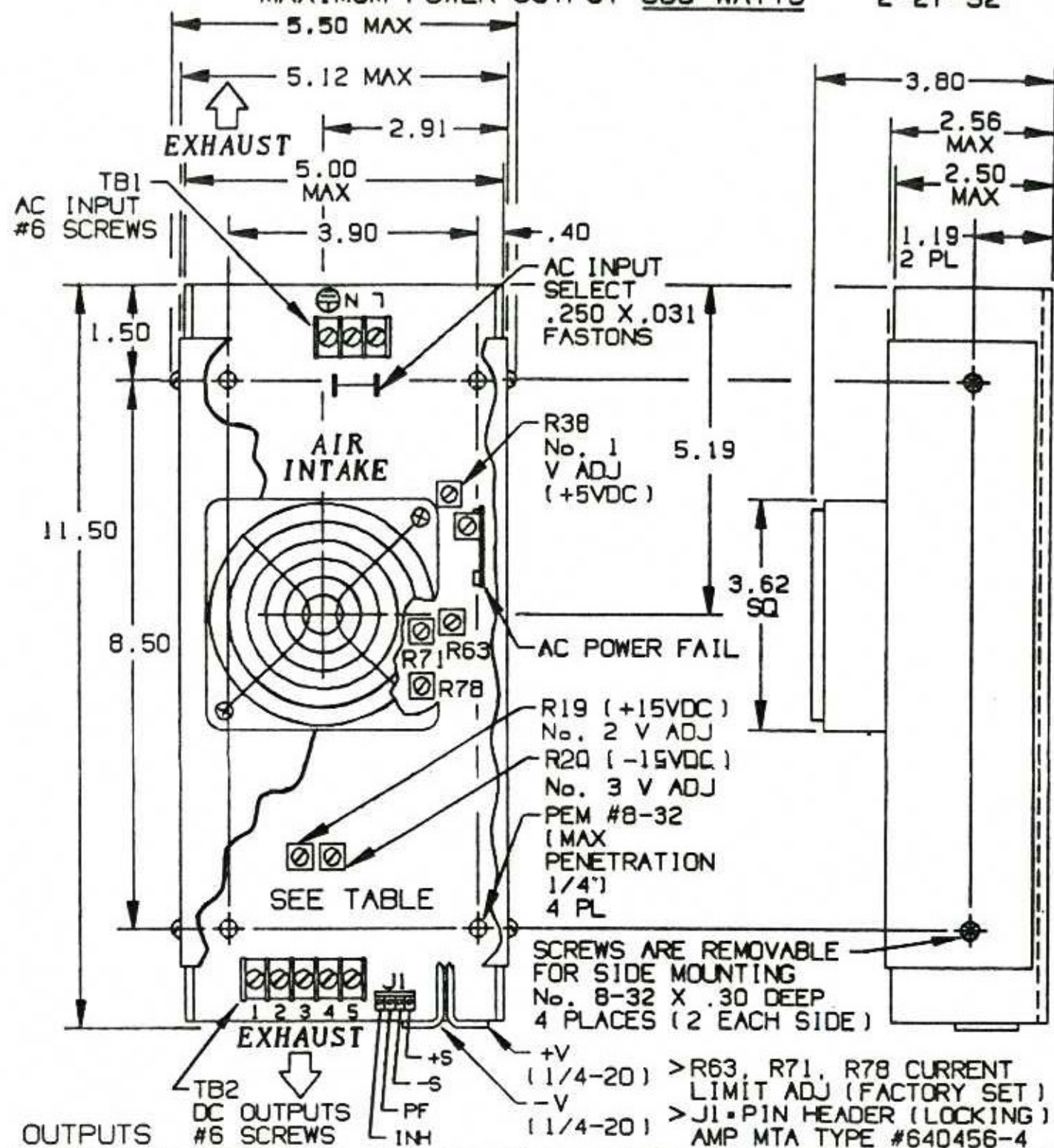
[illegible]

NOTE
 1) ALL RESISTORS ARE IN OHMS
 1/2 WATT, +/-10%
 2) ALL CAPACITORS ARE IN MICROFARADS/UDC
 3) REFERENCE DESIGNATIONS ENDING IN "S",
 REPRESENT SURFACE MOUNT COMPONENTS.



ZONE/LTR	REVISIONS	DESCRIPTION	DATE	APPR
A	PRODUCTION RELEASE		11/23/87	
B	REVISED ECM	1912,1914	01/11/88	
C	REVISED ECM	2000,2013	07/18/88	
D	REVISED ECM	2035	12/30/88	
E	REVISED ECM	2184,2194,2191,2248	03/08/90	
F	REVISED ECM	2264,2432,2471	02/06/91	
G	REVISED ECM	2566	06/21/91	
H	REVISED ECM	2652	09/17/91	
J	REVISED ECM	2669,2738	07/07/92	
K	REVISED ECM	3277	04/27/93	

TOIND PRODUCTS CORP	
SCHEMATIC	
MAX-403-0515P	DR DATE MAX-403-0515/MAX-503-0515
MAX-403-0515	LS 03/08/90 S2 IDENT
MAX-503-0515P	CHK DATE D No.34337 DRAWING No. 9010816
MAX-503-0515	
NEXT ASSY	USED ON
APPLICATION	SCALE NONE SHEET 1 OF 1



OUTPUTS
TB2-1 NOT USED
TB2-2 NOT USED
TB2-3 +15VDC AT 8A (LEVEL 3)
TB2-4 ±15VDC RTN (COMMON)
TB2-5 -15VDC AT 8A (LEVEL 3)

+V +5VDC AT 70A (LEVEL 5)
-V COMMON

AC INPUT IN NORTH AMERICA
115VAC 230VAC
L=LINE 1
N=NEUTRAL N=LINE 2

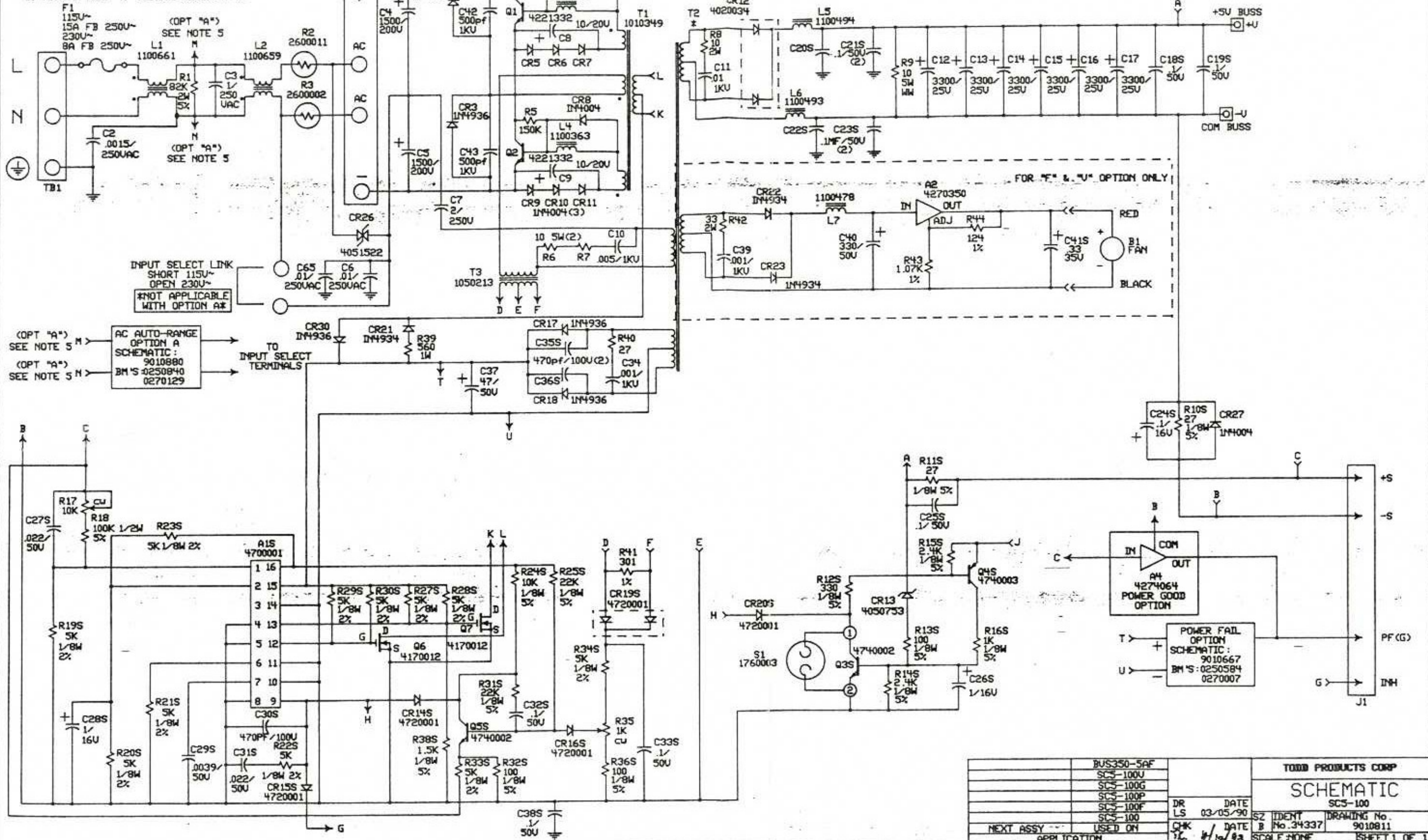
NOTE: THIS UNIT HAS AC AUTORANGE VOLTAGE SELECTOR, AUTOMATICALLY SELECTS PROPER AC LINE VOLTAGE RANGE TO ENABLE POWER OPERATION AT EITHER 115 VAC OR 230 VAC

⊕=SAFETY GND ⊕=SAFETY GND
UNIT IS LEVEL 6 PER CSA

NOTE

UNLESS OTHERWISE SPECIFIED-

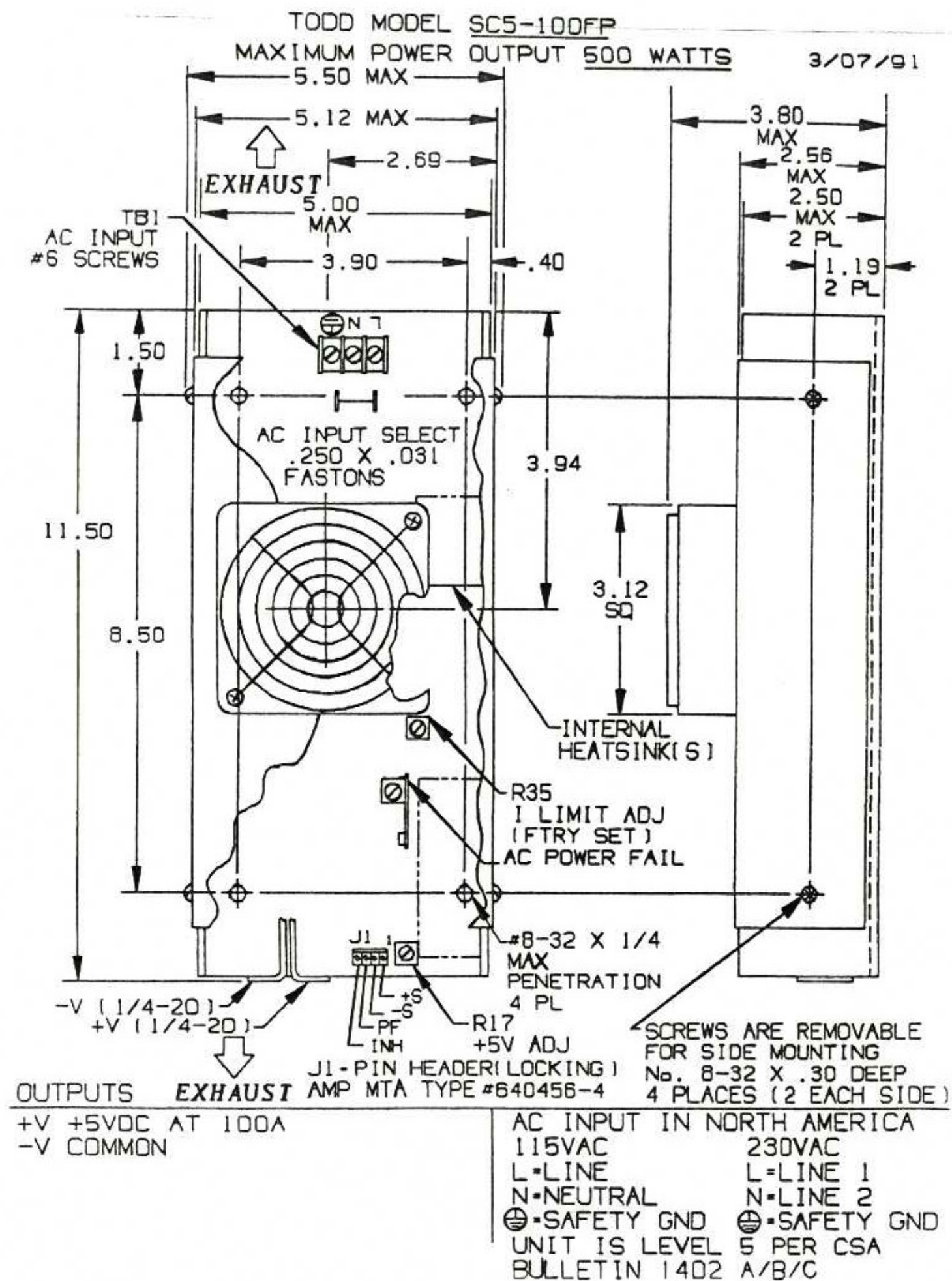
- 1) ALL RESISTORS ARE IN OHMS, 1/2 WATT, +/-10%
- 2) ALL CAPACITORS ARE IN MICROFARADS/UDC
- 3) REFERENCE DESIGNATIONS ENDING IN "S", REPRESENT SURFACE MOUNT COMPONENTS.
- 4) J1-PF TERMINAL USED EITHER FOR OPTION "PF" OR "G"
- 5) WITH OPTION "A" REMOVE RESISTOR R1



PWR XFMR	
T2	OPTION
1010366	F FP G
1010356	G C P CP STD

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR
	K	REDRAWN & REVISED ECH 3199	04/06/93	TZ

		BUS350-SAF				TODD PRODUCTS CORP	
		SCS-100V				SCHEMATIC	
		SCS-100G					
		SCS-100P					
		SCS-100F					
		SCS-100					
		SCS-100		DR	DATE	SCS-100	
		NEXT ASSY --		LS	03-05-90	SZ	IDENT
		USED ON		CHK	DATE	B	No. 34337
		APPLICATION		12	4/19/93	DRAWING No. 9010811	
						SCALE NONE	
						SHEET 1 OF 1	



[illegible]

TODL PRODUCTS CORP.				MODEL	MTC-4C 0515C				BATCH	BATCH
SHEET 2 OF 3				FINAL ASSY	ISSUE	DATE	DATE	DATE	NO.	NO.
DEPT SHEETS				B/M NO. 9601146	B	10-26-92	10-26-92	10-26-92		
				BY	APP'D	EE	M.E.	DATE REL	DATE	DATE
LINE NO.	PART NO.	ISS. SIZE	DESCRIPTION	ECN	QTY PER UNIT	SPACING	F	S		
1			CR12 TO CHASSIS HDW.							
2	5150041		SLEEVENING		2	.175				
3	7055003		SCREW #6-32x5/8 LG. FLAT HD PH		2					
4	6710006		INSULATOR, MICA		1					
5	5150040		SLEEVENING		2	.250				
6	6610206		NUT PLATE		2					
7	7055014		SCREW #6-32x 1/2 LG FH PH		2					
8			CR12 TO T2 LUGS HDW		2					
9	7015008		SCREW #6-32x5/16 LG PAN HD. PH		2					
10	5230001		SOLDER LUG		2					
11	7500005		NUT- HEX #6-32x1/4 AF		2					
12										
13			CR12 BUSS BAR TO L5 LUG HDW		1					
14	7750003		LOCKWASHER, #10 EXT TOOTH		1					
15	7500006		NUT- HEX #10-32x3/8 AF							
16										
17			.Q3, CR15, CR16 TO CHASSIS HDW							
18	7780022		INSULATOR, MICA TOZ20		3					
19	7780020		SHOULDER WASHER #4		3					
20	7053004		SCREW #4-40x3/8 LG. 82° F.H. PH		3					
21	7700005		WASHER #4 FLAT REDUCED OD		3					
22	7730001		WASHER #4 SPLK		3					
23	7500004		NUT- HEX #4-40x3/16 AF		3					
24										
25			COVER TO MAG AMP HS HDW							
26	6210009		COVER - FAB		1					
27	7053008		SCREW #4-40x5/16 LG FLAT HD. PH	2012	2					
28										
29			COVER TO CHASSIS HDW							
30	7053008		SCREW #4-40x5/16 LG AT HD. PH	2012	2					

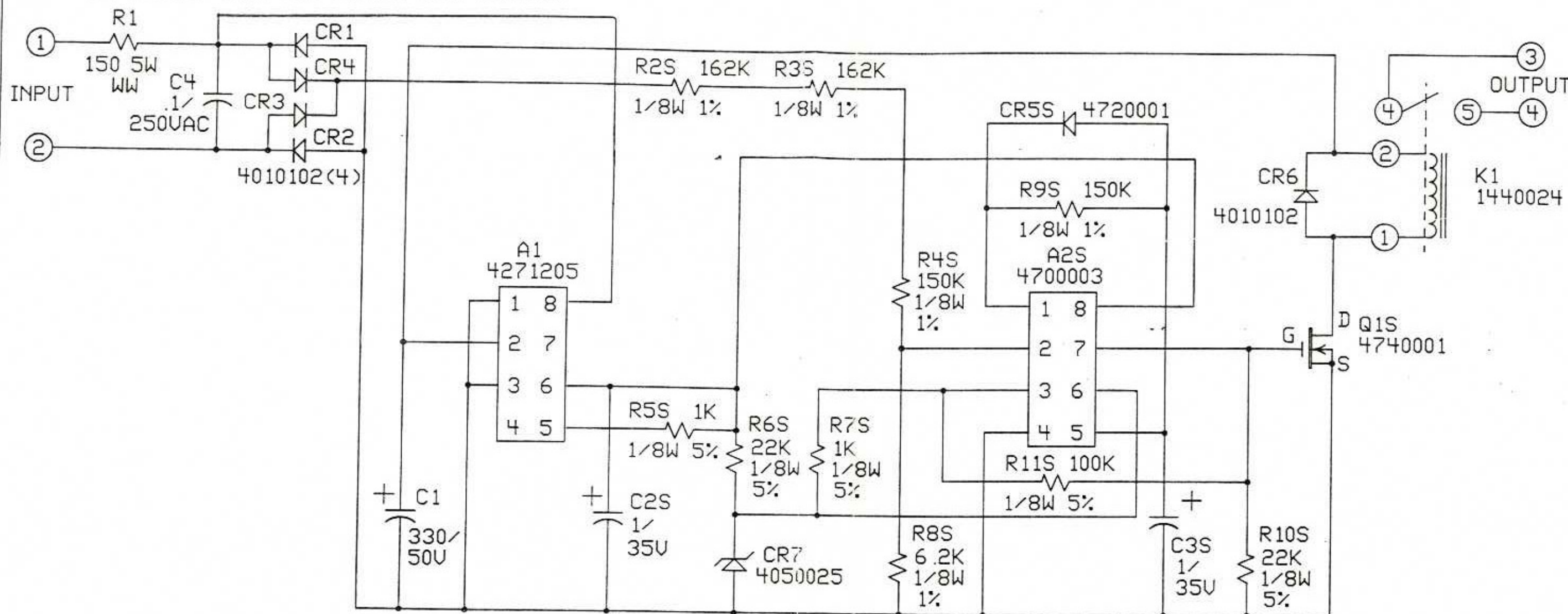
TODL PRODUCTS CORP.				MODEL				FINAL ASSY				MTC-4C-0515C				BATCH QTY		BATCH NO.		
SHEET 3		OF 3		DEPT		SHEETS		BY		APPRO'D		EE		ISSUE		DATE		DATE		
B/M NC.		9601146		10-26-92		10-26-92		M.E.		B		DATE		DATE		DATE		DATE		
DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		DATE		
LINE NO.	PART NO.	ISS.	DWG. SIZE	DESCRIPTION										ECN	QTY PER. UNIT		SPACING		DATE	
1	6830751			NAME PLATE											1					
2				"MARK MODEL" MTC-403-0515C"																
3				"MARK INPUT" 1.04KVA"																
4				"																
5				SCHEMATIC - MAIN															REF	
6	9010816																			
7																				
8																				
9																				
10				THERMAL SWITCH TO CHASSIS HOW											2					
11	7053008			SCREW #4-40X5/16LG 82°F.H. PH											2					
12	7730001			WASHER #4 SP/LK																
13	7500004			NUT HEX #4-40X 3/16 A.F.											1					
14	6230033			COVER FINISHED										3070	REF					
15	6971119			COVER SCREEN										3070	REF					
16	6210098			COVER, FAB										3070	4					
17	7016002			SCREW #8-32X5/16LG 82°F.H. PH.											4					
18	7730003			WASHER #8 SP/LK											4					
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				
27																				
28																				
29																				
30																				

NOTE

UNLESS OTHERWISE SPECIFIED-

- 1) ALL RESISTORS ARE IN OHMS
1/2 WATT, +/-10%
- 2) ALL CAPACITORS ARE IN MICROFARADS/UDC
- 3) REFERENCE DESIGNATIONS ENDING IN "S",
REPRESENT SURFACE MOUNT COMPONENTS.

REVISIONS			
ZONE	LTR	DESCRIPTION	DATE
	A	PRODUCTION RELEASE	01/12/90
	B	REVISED ECN 2391	10/17/90

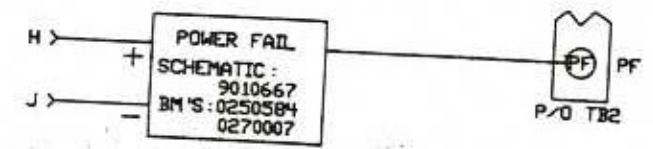
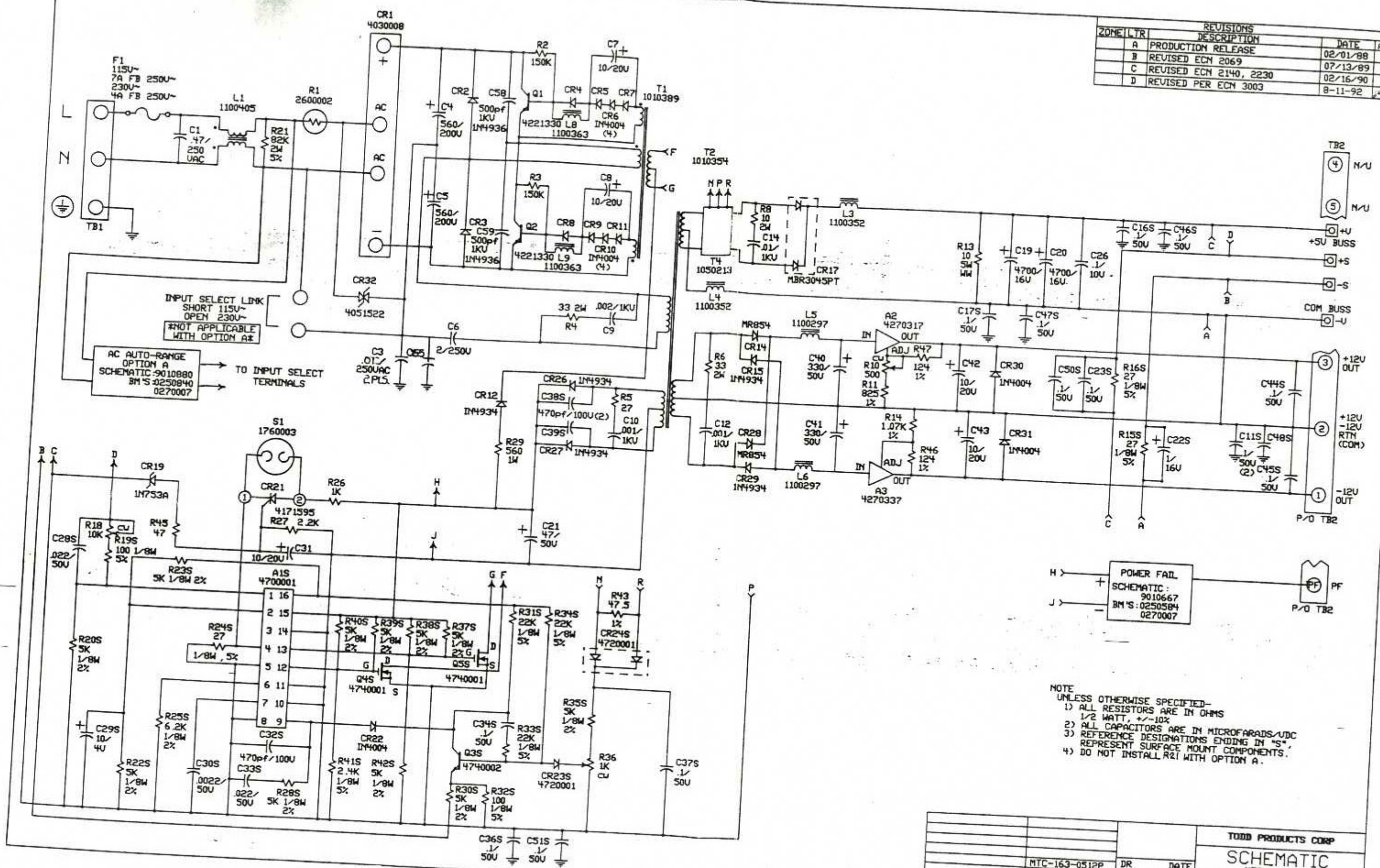


TODD PRODUCTS CORP			
SCHEMATIC			
OPTION "A"			
DR	DATE	SZ	IDENT
JK	01/12/90	B	No. 34337
CHK	DATE	DRAWING No.	
NEXT ASSY		9010880	
APPLICATION		SCALE: NONE	
USED ON		SHEET 1 OF 1	

TODD PRODUCTS CORP.				MODEL				FINAL ASSY SC-100				BATCH QTY		BATCH NO.	
SHEET	1	OF	2	B/M NC	9600802	ISSUE E	DATE 6-17-91	DATE REL	DATE	DATE REQ'D	DATE ISSUED	SUF			
DEPT			SHEETS	B) DB	APP'D	EE	M.E.			PROD. CONT APP'V	BY	DATE	DATE POSTED		
LINE NO.	PART NO.	ISS.	DWG SIZE	DESCRIPTION				ECN	QTY PER UNIT		SPACING				
									ACC	F.S.	BUY	F	S		
1	6010223			CHASSIS - FAB							1				
2	7800007			SPACER, BUSHING							5				
3	6710101			INSULATOR, CHASSIS							1				
4															
5	6770192			HOUSING, 4 POS							1				
6															
7	0250174			COMP BD ASSY				2024			1				
8															
9				(PC BD TO CHASSIS HDW)											
10	7013005			SCREW #4-40X7/16 LG, PAN HD, PH							2				
11	7700005			WASHER #4 FLAT REDUCED OD							2				
12	7730001			WASHER #4 SP/LK							2				
13															
14				(PC BD SAFETY GND TO CHASSIS)											
15	7015002			SCREW #6-32X7/16 LG, PAN HD, PH							1				
16	7700006			WASHER #6 FLAT REDUCED OD							1				
17	7730002			WASHER #6 SP/LK							1				
18															
19				CHASSIS TO TSTR H.S.											
20	7055002			SCREW #6-32X7/16 LG 82° FH, PH							2				
21															
22				HEATSINK BLOCKS TO CHASSIS											
23	6510206			HEATSINK							1				
24								2553							
25	7055002			SCREW #6-32X7/16 LG FH 82° PH				2553			2				
26															
27															
28															
29															
30															

TODD PRODUCTS CORP.				MODEL				FINAL ASSY				C-5-100				BATCH QTY		BATCH NO.								
SHEET 2		OF 2		DEPT		SHEETS		B/M NC		9600802		ISSUE E		DATE 6-17-91		MATERIAL ISSUE		DATE REQ'D		DATE ISSUED		SUP'V				
								B' DB		APP'D E.E		M.E.		DATE REL.		PROD. CONT. APP'V		BY		DATE		DATE POSTED				
LINE NO.	PART NO.	ISS.	DWG SIZE	DESCRIPTION										ECN	QTY PER UNIT		SPACING									
1				CR1 TO CHASSIS (CONT)											ACC	F.S.	BUY	F	S							
2	7055004			SCREW #6-32x7/8 LG FH, 82° PH														1								
3	7700001			WASHER #6 FLAT														1								
4	7730002			WASHER #6 SP/LK														1								
5	7500005			NUT, HEX #6-32 x 1/4 A.F.														1								
6																										
7				CR12 TO CHASSIS																						
8	7055003			SCREW #6-32 x 5/8 LG FLAT, PH										2564				4								
9	6710096			INSULATOR, MICA														1								
10	5150041			SLEEVING										2564				2	.125							
11	6610206			NUT PLATE										2564				2								
12	5150040			SLEEVING										2564				2	.250							
13																										
14																										
15				THERMAL SWITCH TO CHASSIS																						
16	7053004			SCREW #4-40x3/8 LG 82° FH PH														2								
17	7730001			WASHER #4 SP/LK														2								
18	7500004			NUT, HEX #4-40 x 3/16 A.F.														2								
19																										
20	6830755			NAMEPLATE										206A				1								
21				"MARK MODEL" SC5-100																						
22				"MARK INPUT" 1150VA										206A												
23																										
24	9010811			SCHEMATIC - MAIN														REF								
25																										
26																										
27																										
28																										
29																										
30																										

REVISIONS			
ZONE/LTR	DESCRIPTION	DATE	APPR
A	PRODUCTION RELEASE	02/01/88	
B	REVISED ECM 2069	07/13/89	
C	REVISED ECM 2140, 2230	02/16/90	
D	REVISED PER ECM 3003	8-11-92	



NOTE
UNLESS OTHERWISE SPECIFIED-
1) ALL RESISTORS ARE IN OHMS
1/2 WATT, +/-10%
2) ALL CAPACITORS ARE IN MICROFARADS/UC
3) REFERENCE DESIGNATIONS ENDING IN "S",
REPRESENT SURFACE MOUNT COMPONENTS.
4) DO NOT INSTALL R21 WITH OPTION A.

TODD PRODUCTS CORP			
SCHEMATIC			
MTC-163-0512			
DR	DATE	SZ	IDENT
JK	04/29/91	8	No. 34337
CHK	DATE	DRAWING No.	9010805
NEXT ASSY		SCALE NONE	
APPLICATION		SHEET 1 OF 1	

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