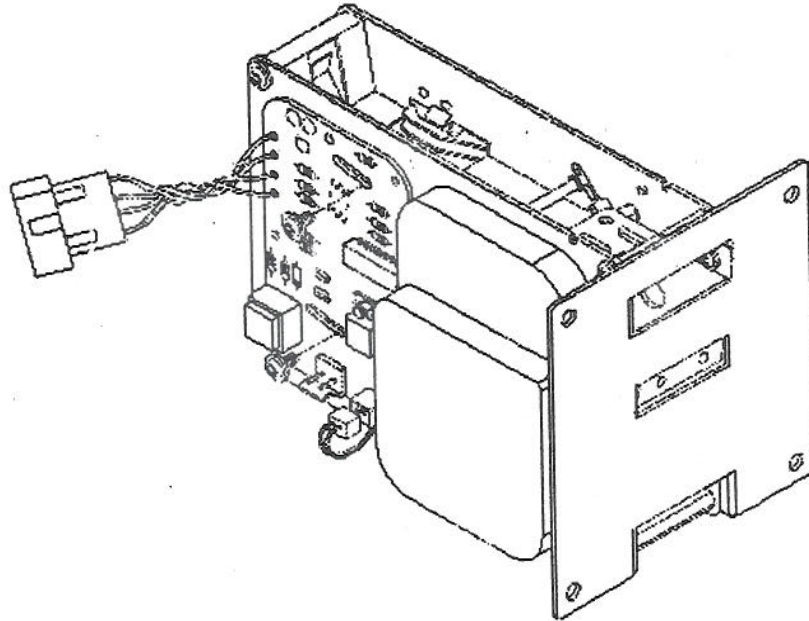


Entropy's ENTD-2000 Quick Reference Guide

The ENTD-2000 has been designed with features that virtually eliminate ticket jams, it requires very little maintenance, making it the most reliable and compatible ticket dispenser on the market today. This guide is designed to explain the basic functions and specifications of the ticket dispenser. Please feel free to call ENTROPY for more details.

BASIC OPERATION



LOADING TICKETS:

- 1) Select ticket width.
- 2) Slide ticket through guide plates until they reach the rollers.
- 3) Depress the auto advance button until the tickets reach the desired location.
- 4) If tickets do not load, ensure that the upper rollers are engaged by pulling back on the latch bar.

NOTE: The upper rollers can be disengaged by pulling on the latch bar. This is useful to clear tickets, etc.

TICKET STOP ADJUSTMENT:

This function allows the length of the tickets protruding from the face plate to be adjusted.

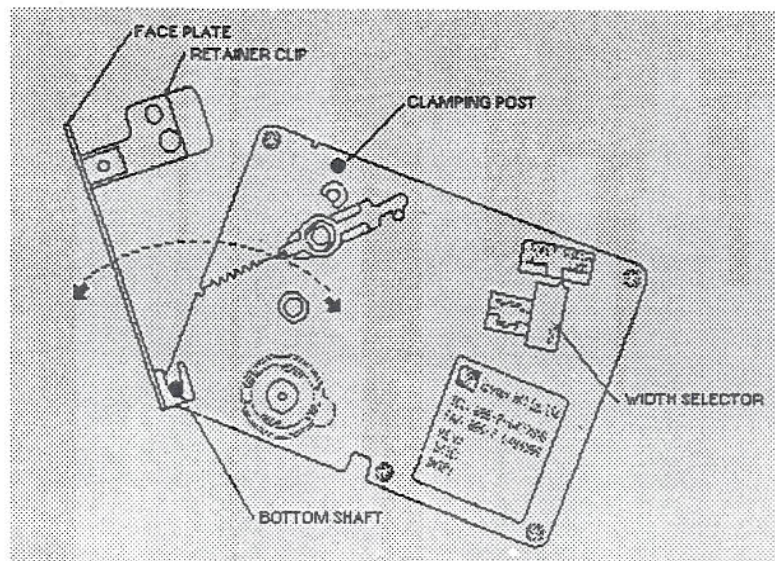
- 1) Turn the two Phillips pan headed screws on the PCB one quarter of a revolution counter-clockwise.
- 2) Move the board forward or backward to the appropriate position.
- 3) Re-tighten the screws.

CLEARING TICKET JAMS:

- 1) Gently pull any tickets that are between the rollers and front plate out the front of the unit.
- 2) Lift the upper rollers by pulling the latch bar back into the unlock position.
- 3) Unlatch the upper ticket guide by raising it off its post in the back.
- 4) Push the tickets away from the ticket width selector toward the optic switch.
- 5) Gently pull the tickets toward the rear of the unit.
- 6) Tear off the damaged tickets and put the upper ticket guide back into place.
- 7) Reload tickets as previously discussed. (Be sure to place the latch bar back to the locked position).

EASY RELEASE AND RE-INSTALL:

- 1) Hold the dispenser unit and bend the retainer clip to remove it from the face plate.
- 2) Swing the unit down then lift it slightly until the dispenser unit releases from the face plate.
- 3) To reinstall: align the post on the dispenser unit w/the U shape brackets on the face plate.
- 4) Swing unit up and snap in place



**—MAKE SURE THE POST WAS HOLDEN BEFORE RE-RUNNING—
ENSURE THE DISPENSER IS FIRMLY LOCKED IN PLACE FORE RUNNING IT AGAIN!**

LED FUNCTION:

GREEN LED: Notch output indicator.

YELLOW LED: Motor Enable.

STANDARD TICKET UNIT : TD-963CR

The TD-963CR is designed to fit more applications. The game's software turns the dispenser on with a logic high signal and monitors a return notch signal from dispenser to turn it off.

OUT PULSE TICKET UNIT : TD-963PR

The TD-963PR is designed for one logic input - one ticket game. The game pulses the dispenser once and one ticket is dispensed.

The TD-963SR uses a switch rather than a logic input. THE GAME MUST ENSURE THE SWITCH WILL NOT BE ACTIVATED MORE THAN TWICE PER SECOND.

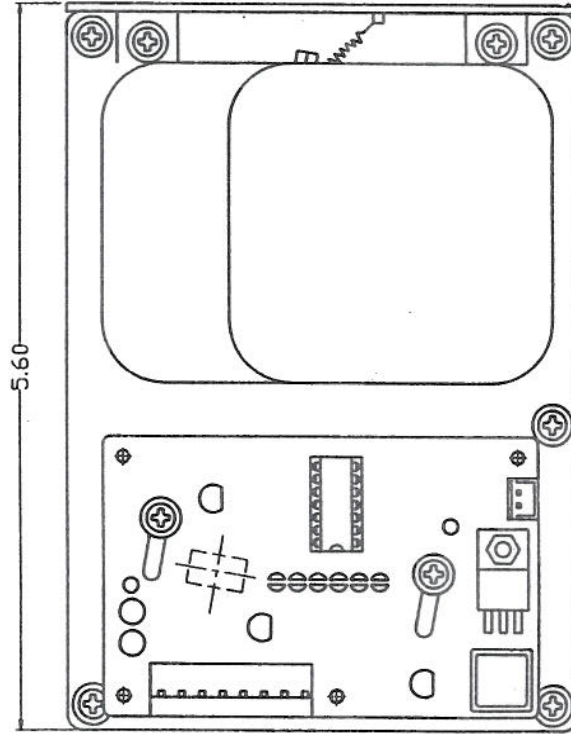
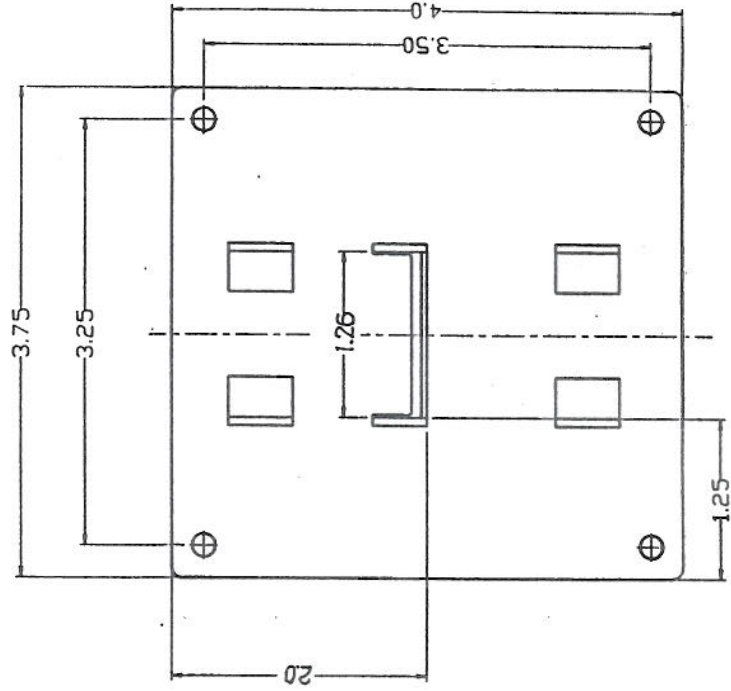
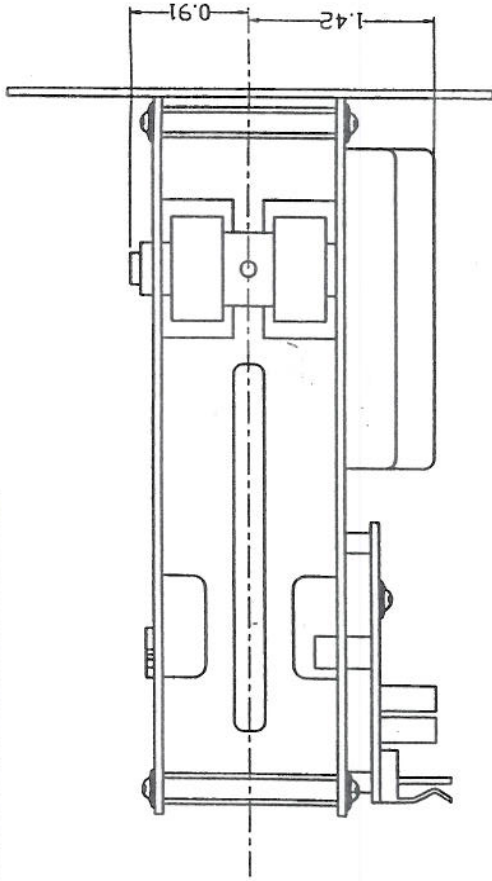
ELECTRICAL CHARACTERISTICS :

TD-963CR :

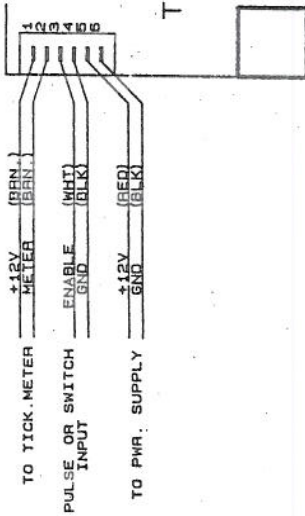
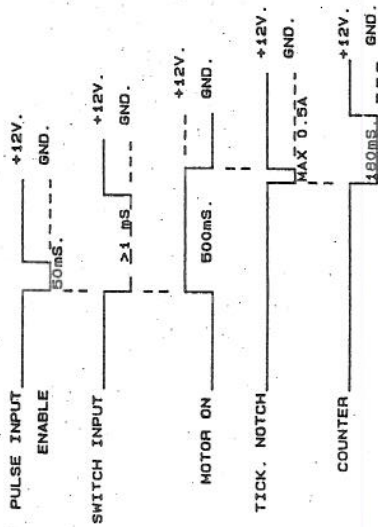
	Min.	Typical	Max.
Supply Voltage	11.0 V	12.0 V	13.0 V
Standby Current		25 mA	
Motor Start Current	1.2 A	1.3 A	1.4 A
Motor Run Current	0.3 A	0.3 A	0.35 A
Motor Enable On Voltage	2.4 V		12 V
Motor Enable On Current	160 uA		4.2 mA
Motor Enable Off Voltage			1.0 V
Motor Enable Off Current			0
Ticket Notch Sink Current			50 mA
Ticket Notch Voltage Pull-up			30 V

REV.	DESCRIPTION OF CHANGE	DATE	APPR.
0	N.P.R.		

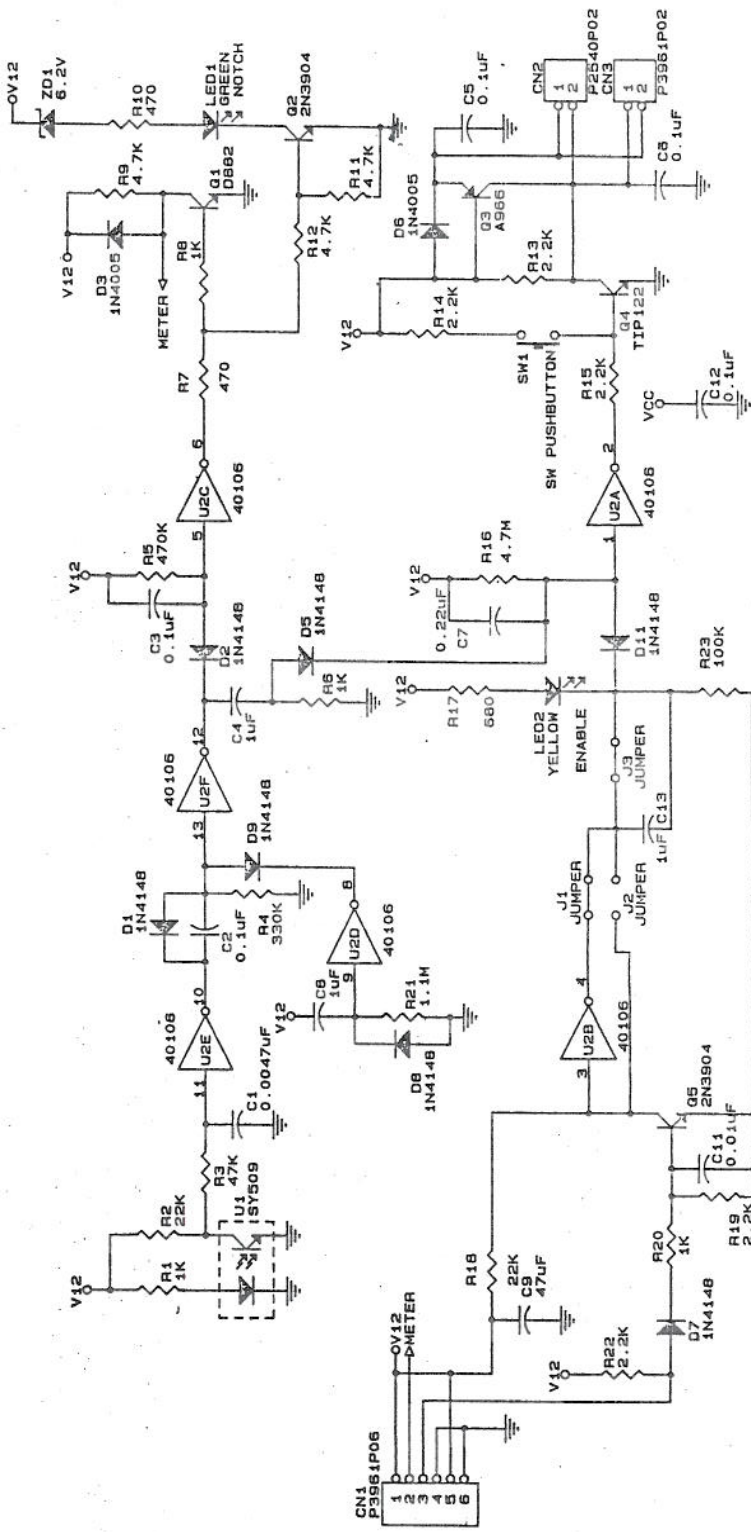
 ENTROPY INTERNATIONAL CO., LTD.		DO NOT SCALE		NAME:	
MATERIAL:		AP. BY:		TICKET DISPENSER	
HEAT TREAT:		CK. BY:		DWG. NO.:	
FINISH/COLOR :		DWN. BY:		SCALE 1=1	
GEN. TOL. UN- LESS NOTED. .X .15 .XX .05 ANG. 1 MAX.		PARKSDN 3-14-'94		SHEET	
		CAD NO. T DASSY		REV. 0	



963P



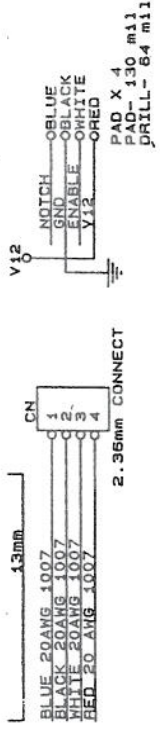
TD BOARD



NOTE1: With SW Input, cut J3 off (open).
 NOTE2: Enable pulse may be positive or negative depending on jumper settings.
 NOTE3: For Positive input (J1 open, J2 short)

Model # TD963P, Pulse Input
 Model # TD963S, SW Input

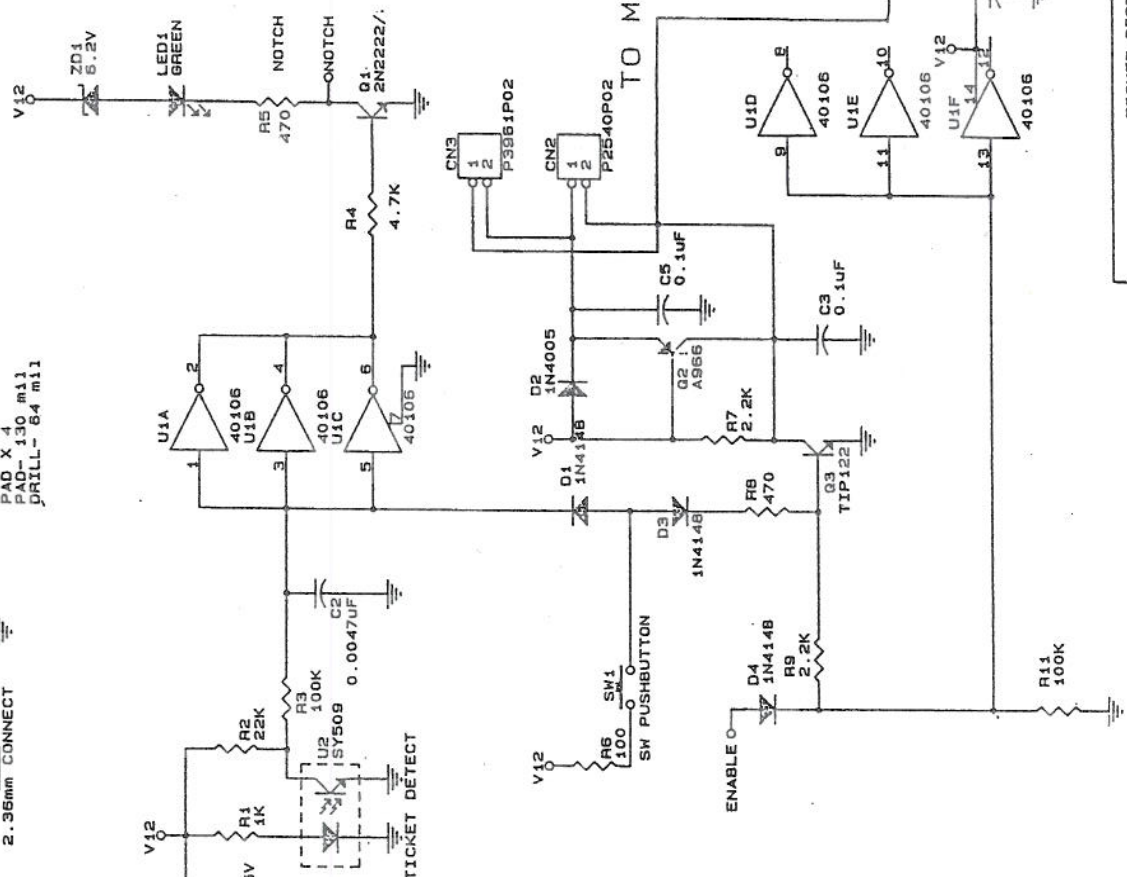
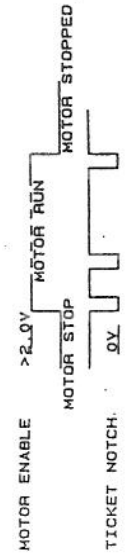
Size	Document Number	TICKET DISPENSER
B	TD-963P, TD-963S	
REV		D



MOTOR SUPPLY-V	MIN.	TYP.	MAX.
I (START)	1.1V	12V	13V
I (RUN)	1.2A	1.3A	1.4A
I (STANDBY)	-	0.3A	0.35A
	-	-	25mA

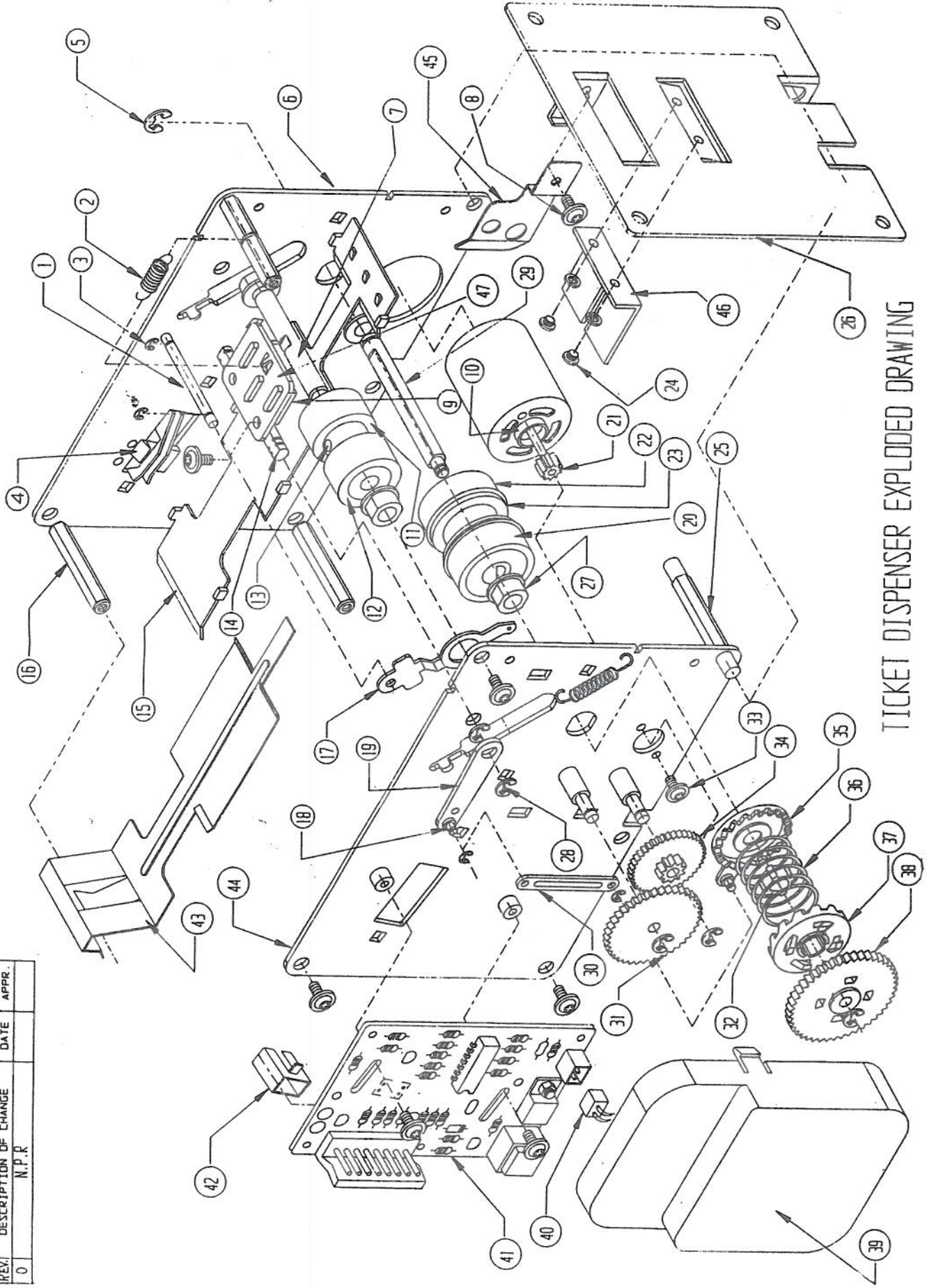
MOTOR ENABLE ON-V	+24V	-	+12V
I	160µA	-	4.2mA
MOTOR ENABLE OFF-V	-	-	1.0V
I	-	-	0

TICKET NOTCH-SINK-I	-	-	50mA
V PULL-UP	-	-	30V



TICKET DISPENSER
 Size Document Number: TD-963C
 B
 Date: APR 11 22, 1995 Sheet 1 of 1
 REV D

REV.	DESCRIPTION OF CHANGE	DATE	APPR.
0	N.P.R.		



TICKET DISPENSER EXPLODED DRAWING

TD-963CR/PR

NO.	PART NO.	DESCRIPTION	QTY.	NO.	PART NO.	DESCRIPTION	QTY.
1	104-4011-00	PULL BACK BAR	1	31	101-1015-00	GEAR-12T, 40T	1
2	110-0005-00	STOPPER SPRING	1	32	101-1012-00	CLUTCH SLEEVE	1
3	106-6011-00	2mm E-RING	2	33	106-6002-00	M2.6X0.45+5PS-NI	2
4	101-1005-00	ADJUSTER BLOCK	1	34	101-1014-00	GEAR-1 10T, 39T	1
5	106-6003-00	4mm E-RING	1	35	101-1011-00	BRAKE ACTION PLATE	1
6	102-2039-00	R-SIDE BRKT.	1	36	110-0006-00	CLUTCH SPRING	1
7	104-4013-00	IDLE SHAFT	1	37	101-1010-00	CLUTCH	1
8	106-6005-00	M3X0.5+6C-N1	16	38	101-1013-00	MAIN GEAR 46T	1
9	108-8001-00	STOP RUBBER 1/2" X 1"	1	39	101-1016-00	GEAR COVER	1
10	212-2002-00	DL MOTOR 12V	1	40	214-4001-00	MOTOR LEAD WIRE	1
11	104-4004-01	IDLE ROLLER	1	41	200-963C-00	P.C. BOARD A'SSY (CONTINUOUS)	1
12	104-4004-03	IDLE ROLLER RUBBER	2	42	101-1007-00	OPTO SW. COVER	1
13	106-6001-00	M4X5 HEX SCREW	1	43	102-2034-00	TICKET GUIDE(UP)	1
14	104-4015-00	STOPPER SHAFT	1	44	102-2040-00	L-SIDE BRKT.	1
15	102-2041-00	TICKET GUIDE (BOTTOM)	1	45	102-2045-00	HOLD BLADE	1
16	104-4006-00	HEX POST	4	46	102-2035-00	TICKET GUIDE (FRONT)	1
17	102-2007-00	ROLLER SLIDE BRACKET	2	47	102-2038-00	STOPPER	1
18	104-4009-00	STUD	1	48	200-963P-00	P.C. BOARD ASSY. (PULSE)	1
19	102-2036-00	LEVER ARM	1	49			
20	101-1017-00	ROLLER (OUTER)	2	50			
21	104-4014	MOTOR PINION 10T	1	51			
22	102-2042	ROLLER RATCH	2	52			
23	101-1018	ROLLER (INNER)	2	53			
24	27-1008	#6-32 SCREW	2	54			
25	104-4017-00	ROTATION SHAFT	1				
26	102-2044-00	FACE PLATE	1				
27	105-5001-00	SHAFT BUSHING	4				
28	106-6019-00	3mm E-RING	6				
29	104-4012-00	MAIN SHAFT	1				
30	102-2037-00	LINK	1				