Quick Reference Guide for TD6030P Ticket Issuing Machine





3-26-10

Table Of Contents

PAGE

1-Safety considerations.22-Electrical connections.23-Mounting and installation.34-Ticket specification.55-Ticket routing.56-Programming of the display unit.87-Operations and user interface.118-Bar code format.139-Cleaning and maintenance.1310-Clearing paper jam.1411-Troubleshooting.1512-Specifications.16

SECTION

Section 1 Safety Considerations:

TD6030P is a fully automatic ticket-issuing machine. Like any electrically operated equipment, adherence to safety requirements is strongly recommended.

Always turn off the dispenser power located on the main controller board and the printer power switch located in the back section of the printer assembly prior to any type of maintenance.

Although the cutter section of the printer is fully encapsulated, the attendants should be warned against the possible consequences of unauthorized service related to electrically operated blades of the cutter mechanism.

The earth electrical ground must always be connected to the chassis of the dispenser.

Section 2 Electrical connections

TD6030P requires single phase 110VAC 50/60 Hz current for its operation. The line feeding the dispenser must be protected with a serial 10 amp circuit breaker at the main circuit panel.

The dispenser chassis and cabinet must be connected to earth ground.

The power cable provided from the power module of the dispenser should be connected directly to a receptacle with ground fault protection.

Section 3 Mounting and installation

The following is the foot print of the TD6030P dispenser.

Care must be taken to avoid vehicle impact to the dispenser at all times. If in doubt always place protective post to prevent vehicle impact.



Use concrete anchor bolts to secure the dispenser housing to the concrete island.

Elevate the cabinet from the concrete by placing flat stainless steel washers between the cabinet and the mounting platform.



Section 4 Ticket roll specifications:

The following is the specification for the thermal tickets of the TD6030.

The tickets are roll type; Core ID : $3.0" \pm 0.010"$ Paper thickness: 0.007" or 0.0045"Width: $2.310 \pm 0.010"$ Thermal sensitive side faces the core. Roll OD not to exceed 11.0"

Compliance to the specifications of the ticket roll and the paper type is critical to the operation of the dispenser and the printer. Any deviation from the set of the specification outlined above can cause major degradations in the performance and the life of the printer.

Section 5 Ticket routing

Ticket routing is very important. Improper ticket routing and installation can cause paper jams in the machine.



Examine the ticket roll carefully. Thermal sensitive side must be facing the core of the roll. Equally, the sensitive side must be fed to the printer assembly "**facing down**". Refer to the drawing.

The ticket must then be fed to the printer mechanism. Refer to the drawing:



Ticket routing is very important. The unit will not operate properly if the ticket is not fed or routed properly. The ticket dispenser mechanism can easily be removed from the support tray. There are no screws holding the printer mechanism in place.





In the event of ticket jam you may lift the front part of the ticket/cutter feed and clear the jam. Refer to the drawing.



Section 6 Programming of the display unit

TIME, DATE, and MESSAGE PROGRAMMING

General:

The TD6030P is equipped with a real time clock using the 24 Hour format, and a calendar. In addition to the time and date, a total of three lines may be programmed to print on each ticket, as well as one twenty character line may be programmed to appear on the display of the TD6030P.

Programming the TD6030P is accomplished through the use of a single three position switch. The location of the programming switch can be seen in the drawing below with the words "Step", and "Prog". The center position is off or "do nothing" position, and the switch should return to this position when it is not being pressed toward "Step" or "Prog".



How the Programming Switch Works:

Basically, once the system is in the programming mode (explained in the next section), pressing the Switch in the Step direction and releasing it will increment the field above the Cursor one digit for numeric fields, or one character for the alpha-numeric fields as is the case for the message lines.

When the Programming Switch is **HELD** in the Step direction, the system automatically advances the value or character of the field above the Cursor at a rate of approximately three characters per second. As an example: If the Cursor is under the Minutes field, holding the Programming Switch in the Prog. direction causes the system to automatically increment the Minutes at the automatic advancement rate.

After the field being programmed is correct, pressing the Programming Switch in the Prog. direction and releasing loads the field's setting into the controller's memory, and advances the Cursor to the next field.

In the sections concerned with programming the TD6030P, the quoted word Step in brackets, [STEP], means to press the programming switch toward the word Step, and the quoted word Prog. in brackets, [PROG], means to press the programming switch toward the word Prog.

Entering the Programming Mode:

To enter the Programming Mode, **[STEP]** and release. The system will respond by displaying the Day of the Week, the Date, and the Time with a Cursor or underline beneath the Month digits (as shown). **MON** <u>01</u>/23/01 23:45

CURSOR

The system is now in the programming mode. NOTE: THE SYSTEM WILL NOT ISSUE A TICKET WHILE IN THE PROGRAMMING MODE

Setting the Time, Date, and Day of the Week:

The Time, Date, and Day of the Week consist of six fields in the following order;

1) Day of the Week, 2) Month, 3) Day, 4) Year, 5) Hour - 24 hour format, 6) Minute.

The day of the week will automatically be set after Month, Day and Year are set. With the Cursor under the Month [PROG] and release will advance the Month.

When a field is correct [STEP] and release. This advances the Cursor to the next field. Once in the next field [STEP] and release will advance the field, and [PROG] advances to the next value in a field.

The above process is repeated until the Cursor is under the minutes field which causes the time/date to be loaded into the systems memory, and the system to enter message programming.

Message Programming:

After the time and date are set the system will prompt for the Display and Printed Line Messages in the following order:

SET DISPLAY MESSAGE SET LINE 1 MESSAGE SET LINE 2 MESSAGE SET LINE 3 MESSAGE

To have a current programmed message displayed [PROG].

If the message displayed is to be changed [PROG] a second time. If the message is correct [STEP] to skip changing the line being displayed and advance to the next message.

Once the message has been entered by **[PROG]** twice, once to display the message and the second time to enter a new message, the system displays a **BLANK LINE** with the Cursor in the center of the display.

If the message is to be a blank line [PROG] as many times as required to exit the message being programmed and advance to the next message.

At this point [STEP] changes the character above the Cursor to the next letter in the alphabet, or number in the following sequence:

[SPACE], A through Z, through 0, then back to the beginning [SPACE]

Holding the programming Switch in the Step direction changes the letter or number automatically at approximately four (4) characters per second.

When the character above the Cursor is correct **[PROG]** to advance the Cursor to the next character position.

When the message is correct, **[PROG]** as many times as required (short message lines may require more than 4) to exit the message being programmed and advance to either the next message or, in the case of setting the line 3 message, the normal running mode.

If a message was changed, approximately a 30 second are required before the new message appears on the ticket.

The following prompt can also appear on the display of the unit.

- Temperature
- Time/ date (military format)
- One 20 character message
- "Ticket Out"
- "Ticket Jam"

Section 7 operation and the user interface

The controller board is equipped with a fast blow fuse (AGC4) Do not substitute with a higher value or slow blow type fuse. Consult EPS in the event the unit blows the fuses repeatedly.

The heater switch is located in the main panel close to the power transformer. Heater should be turned on during the cold winter period or high humidity condition.

A separate fuse protects the secondary winding of the transformer. The value of the fuse is AGC#3. Do not substitute with any other value.

The operation of the fan is fully automatic. The fan is designed to turn on at 95 F.

TD6030P (Connection to the gate and loop detectors)

The 10 position terminal block controls the barrier gate and receives commands from the loop detectors. Connect the open input of the barrier gate to terminals 2 and 3 of the TD6030P. All inputs to the barrier gates must be low voltage. The vend relay in the dispenser is a normally open dry closure contact rated for 1.0 Amp at 24 VDC. This contact momentarily closes for 300 milliseconds to activate gate.

The following is the listing for the 10 position terminal block:

10	NC
9	NC
8	NC
7	NC
6	NC
5	Arming Loop/Gate Arm Status
4	Arming Loop/Gate Arm Status
3	Gate Open Output COM
2	Gate Open Output N.O.
1	Gate Open Output N.C.

Caution! CARE MUST BE TAKEN NOT TO IMPROPERLY CONNECT THE TERMINALS TO ANY ADVERSE CURRENT OR VOLTAGE. THE OUTPUT OF THE LOOP DETECTORS SHOULD BE DRY RELAY CONTACTS. IF IN DOUBT, ALWAYS CONTACT EPS OR YOUR DISTRIBUTOR FOR ASSISTANCE.

A typical connection to the loop detector and the model 301 barrier gate is shown in the following diagram:

FOR MODEL 301 PARKING GATE TO TD6030P TICKET MACHINE TD6030P

FIELD CONNECTIONS



IF ARMING LOOP OR GATE STATUS SWITCH IS NOT USED, ADD JUMPER BETWEEN TERMINALS 4 & 5.

GATE STATUS OPTION: ORDER GATE OPERATOR WITH EPS P/N 492-1-1 EXTRA LIMIT SWITCH

ARMING LOOP OPTION: ORDER: EPS MODEL 3416D LOOP DETECTOR

> ENGINEERED PARKING SYSTEMS 25010 AVENUE TIBBITTS VALENCIA, CA 91355 (661) 294-0778

> > 3-3-10

Notice! PLEASE SHORT PINS 4 TO 5 IF ARMING LOOPS OR GATE ARM STATUS INDICATOR ARE NOT USED. The connector is equipped with a quick disconnect terminal for ease of connecting the wires to the main board. Section 8 Bar code format



Time : 11:37 Date : 03/11/2010 Ticket: 68000051 The bar code format is: Code 2 of five Y, MM,DD,HH,mm,I, LL,XXXXXX

- Y (year)
- MM (month)
- DD (date)
- HH (hour)
- Mm (minute)
- I (identification)
- LL (lane number)
- X..X (six digit ticket number)

The ticket length is factory set to 4.0".

Section 9 cleaning and maintenance

The EPS TD6030 printer is designed to require a minimum of maintenance and service. This section provides instructions for cleaning and maintenance. Electrical and mechanical repairs should be performed by qualified personnel only. Make certain that all electrical connections are disconnected before any service is performed on the dispenser.

Cleaning

The printer exterior cabinet may be cleaned with a non-abrasive cleanser. Care should be taken to prevent liquids from entering inside the mechanical assembly. If in a dirty environment the mechanism may be cleaned with alcohol and a cotton swab. The mechanism may also be "blown out" with compressed air. Do not direct air flow directly to the printer platen, this may damage the printing surface on the platen. When the mechanism is clean and free of dirt, a light silicone lubricant may be applied (sparingly) to the moving mechanical components.

Printing Malfunctions Examples of Printing Problems (Cause and Effect)

- worn print head
- poor quality thermal paper
- damaged thermal print head
- premature wear of the thermal print head
- printing with paper not specified for this dispenser

Section 10 Clearing ticket jams

If a jam does occur in the output section of the intelligent paper delivery system of POM101S thermal printer, the output guide and cutter assembly may be rotated upward to gain access to the mechanism output / cutter input area. To rotate the output assembly: 1. Turn the unit off and remove primary power by disconnecting the power cord.

2. Using your thumb on each hand, apply light pressure in an outward motion to the green color lever located on the side of the plastic cutter frame. While spreading the frame latches, apply a forward and rotating motion with your forefinger to the cutter assembly.

3. Once free, the assembly may be rotated upward 90' from the pivot, which should provide access to the jam area.

4. Open the printer platen with the paper release lever on the left side of the printer. The jammed paper may be removed at this time.

5. Once the paper has been removed, close the printer platen and lower the output assembly to their home positions. Then, apply power to the unit. Normal printing may be resumed at this time.

Section 11. Trouble Shooting the printer

1- **No power (LED off).** Power not connected. Fuse blown. Power switch not "ON" Connect unit to power. Check fuses. Turn power switch on.

2- **Paper will not feed or load**. Paper jammed in mechanism. Wrong paper. No straight edge on paper. Paper release lever up. Defective paper sensor. Check for paper jam. Check paper type. Cut edges straight, or fold over and crease. Move lever to door position.

3-*Will not self test*. No power. Did not hold line feed long enough. Paper not in stalled properly. Paper jam. Defective line feed switch. Paper release lever Up. Check all Outlined above. Hold line feed longer. Check roll orientation. Clear jam Contact EPS if problem persists. Return paper release to down position

4- *Paper feeds but does not print*. Paper upside down. Wrong paper. Paper release lever not locked. Turn roll over. Use specified paper. Return paper release to down position.

5- *Light prints on one side*. Paper jammed onto one side. Paper off of print head. Align paper check paper release lever.

6- *Light print*. Wrong paper (poor quality). Paper release not locked. Paper partially jammed. Use specified type paper. Check paper release lever Check mechanism for jam.

7- **Delivery Jam**. Wrong paper (paper wound wrong). Ticket too short. Exit path blocked. Use specified type paper.

8- **Does not cut**. Paper jam. Wrong paper. Cutter jammed. Clear jam. Use specified type papers. Contact EPS.

9- *Low paper not functional*. Paper not on roll properly. Paper low sensor dirty. Wrong paper. Re-align or replace roll. Clean with soft brush. Use specified type paper.

12- Specification

12-1 Electrical

Power requirement

24V AC @ 4 amp, 50/60 Hz

Total power consumption

Quiescent	7.2 watt
While issuing ticket	24 watt
Heater or Cooler operating	75 watt

Vend loops :

Low power inductive type vehicle access detector. Output Presence : Closure to ground (Normally Open). A low supply voltage type (24 VAC) is preferred.

Barrier gate electrical connection:

All electrical control signals from the barrier gate must be low voltage. The vend loop control relay in the ticket dispenser is "normally open" dry contact rated for 1.0 amp at 24 VDC. The contact momentarily closes for 300 milliseconds to activate the vend loop.

12-2 Mechanical

Dimensions:



Environment : Temperature 15 F- 120 F Relative humidity 5% -95% (noncondensing). Weight: 110 pounds (50 Kg) for single mechanism model

Limited Warranty

PRINTER LIMITED WARRANTY

For one (1) year after shipment of the dispenser/printer product to Buyer, EPS warrants the product against defects in materials and workmanship provided the product has been operated and maintained in accordance with manufacturer's operating and maintenance specifications. This warranty specifically excludes any consumable items. THIS WARRANTY IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. EPS MAKES NO OTHER WARRANTY AND BUYER SPECIFICALLY WAIVES ANY OTHER WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES, WHICH EXTEND BEYOND THOSE DESCRIBED HEREIN.

EPS's liability hereunder is limited to the repair or replacement of defective parts. This liability does not extend to normal wear and tear. EPS will, solely at ifs option, remedy all valid warranty claims either by (a) Repairing or replacing the defective unit at EPS's factory; or (b) Repairing or replacing the defective subassembly at EPS's factory. If so directed by EPS, Buyer shall return the defective unit or subassembly, transportation prepaid by Buyer, to EPS's factory. After repair or replacement has been accomplished, EPS will return the unit or subassembly, transportation prepaid by EPS, to Buyer. As a precondition to any warranty service, prior to return of any units or subassemblies to EPS by Buyer, Buyer must contact EPS's Order Administration Services and receive authorization in the form of a Return Material Authorization (RMA) number. EPS reserves the right to refuse any goods it has not previously authorized for return, or any goods shipped without transportation prepaid.

NO WARRANTY SHALL APPLY TO ANY DAMAGE RESULTING FROM OR CAUSED BY BUYER IF BUYER SHALL MAKE ANY CHANGES MODIFICATIONS, ADDITIONS OR DELETIONS OF HARDWARE, SOFTWARE OR FIRMWARE IN THE PRINTER PRODUCTS SOLD HEREUNDER WITHOUT MANUFACTURER'S ADVANCE WRITTEN CONSENT.

Limitation of Liability.

EPS shall not be liable to customer for any lost profits, lost business, lost savings or any special, exemplary, indirect, incidental or consequential damages, arising out of the use of the product, technical information, services or other items provided, or the use or inability to use any of the foregoing, even if EPS has been advised of the possibility of such damages, or for any claim by any other party. In no event will the liability of EPS for any claim arising out of or relating to the use of its product exceed the price paid for the product or other item or service on which the claim is based.

Governing Law.

Any claim arising out of the use of or relating to the use of this product or other item or service on which the claim is based shall be governed by, construed and interpreted in accordance with the laws of the State of California. Limitation on Actions. No action, regardless of form, arising out of the use of or relating to the use of this product or other item or service on which the claim is based may be brought by customer more than one (1) year after the cause of action has arisen.