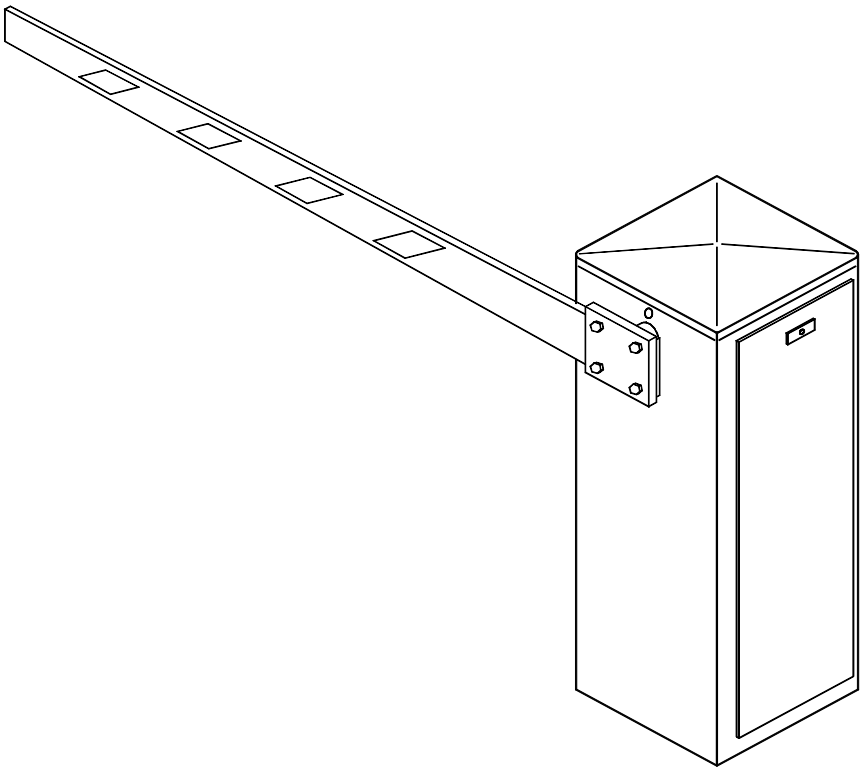
- **WARRANTY**
- **INSTALLATION**
- **OPERATION**



DELTA SCIENTIFIC CORPORATION

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WARRANTY AND LIMITATION OF LIABILITY

Delta Scientific Corporation warrants that during the first ninety (90) days from date of shipment, the Products will be free from defect in material and workmanship. Delta's sole obligation under this warranty shall be to repair (or at Delta's option, to replace), FOB: Palmdale, California, any defective product, without charge to Buyer, provided that, (a) Buyer gives Delta written notice of any such claimed defect within such period of ninety (90) days, (b) the Products, if installed, were installed by a Delta authorized installer, (c) the Products have not been altered, subjected to misuse, negligence or accident, or used with parts not authorized by Delta, and (d) the Products have been maintained in accordance with the instructions provided. NO OTHER WARRANTY IS EXPRESSED AND NONE SHALL BE IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR USE OR FOR A PARTICULAR PURPOSE. THE FOREGOING STATES DELTA'S ENTIRE LIABILITY WITH RESPECT TO THE PRODUCTS. IN NO EVENT SHALL DELTA BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH RESULT FROM THE USE BY BUYER OR ANY OTHER PARTY, OF THE PRODUCTS, AND IN NO EVENT SHALL DELTA'S LIABILITY EXCEED THE AMOUNTS PAID BY BUYER FOR THE PRODUCTS HEREUNDER.

DISCLAIMER

Please note - careful consideration must be devoted to the selection, placement and design of a Barricade installation. Just as in the case of any Barricade system, perimeter security device or security gate that blocks a roadway or drive, care must be taken to ensure that approaching vehicles as well as pedestrians are fully aware of the Barricades and their operation. Proper illumination, clearly worded warning signs, auxiliary devices such as semaphore gates, stop-go signal lights, audible warning devices, speed bumps, flashing lights, beacons, etc. should be considered. Delta has information available on many such auxiliary safety equipment not specifically listed herein. It is strongly recommended that an architect and/or a traffic and/or safety engineer be consulted prior to installation of a Barricade system. Delta will offer all possible assistance in designing the operating equipment, controls and the overall system, but we are not qualified, nor do we purport to offer either traffic or safety engineering information.

INTELLECTUAL PROPERTY, DRAWINGS, SPECIFICATIONS AND TECHNICAL DATA

The drawings and/or data included with this equipment unless otherwise noted remain the confidential property and trade secret of Delta Scientific Corporation. They shall not be disclosed, reproduced or used for manufacture, design or construction without the express authorization of Delta Scientific Corporation. The recipient by accepting these drawings and/or data, assumes custody thereof and under the above terms agrees not to allow the use of by unauthorized persons.

Table of Contents

DELTA SCIENTIFIC CORPORATION
MODEL AG812 ACCESS GATE

General

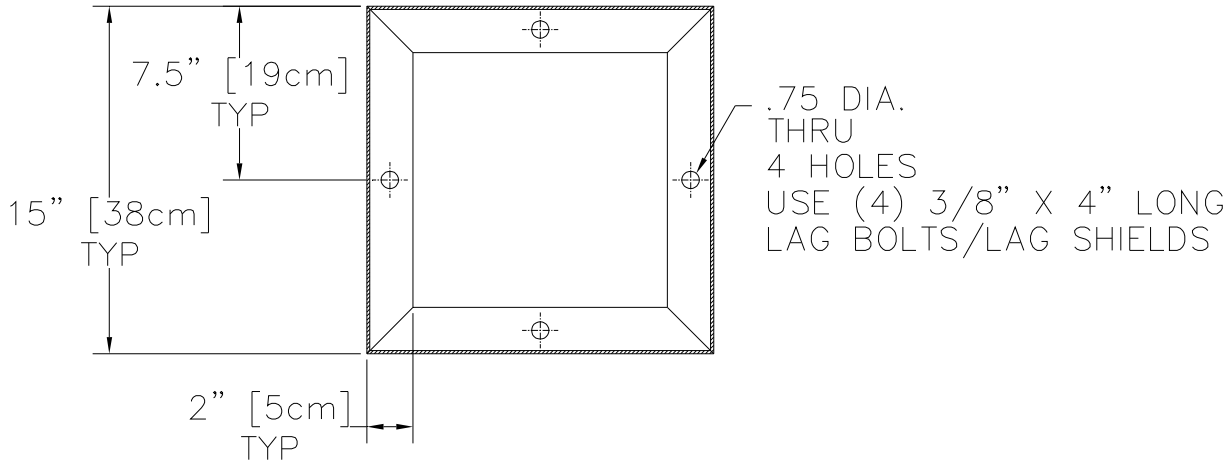
The Delta Scientific Corporation Model AG812 Access Gate is a heavy-duty unit designed to meet the many needs of restricted traffic control. A large array of control modes are permitted, including auto/manual operation in conjunction with local or remote pushbutton stations, timers, radio controls, vehicle loop detectors, infra red detectors, ticket spitters, card readers, coin or token devices, and computerized electronic tag systems. These devices may be used independently or in combination. In short, any device which can provide a contact closure may be used to vend or reset the Gate.

Safety

The Model AG812 Access Gate is equipped with an electric motor driving the gate arm through a vee-belt/gear box system. Keep hands and fingers away from the unit interior when power is on. Shut power off before adjusting limit switches or belt tension. Wiring to the terminal strip should be made by a competent electrician according to the NEC (NFPA 70) and applicable local codes.

Installation

The Model AG812 is packed in a reinforced cardboard carton with an inner poly bog to guard against moisture. Do not stack cartons or leave out in the elements until ready to set. Gate model number and accessories are marked on carton top.



The AG812 is to be located on a **solid, non-combustible surface**, such as concrete. Mark the Gate location from the architect's drawings. Conduit for the Gate motor and controls must be brought to the stub-up area within the Gate's bottom opening (shown above). Foundation bolt location can be marked from the Gate itself or from a template (Delta P/N D03180).

1. Remove cardboard flanges of carton from wooden pallet. Lift carton clear of the AG812 Gate. Do not cut through carton while on the Gate; the knife may score the Gate finish!

2. Insert the key in the lick, unlock and remove cabinet door.

3. Remove bolts holding cabinet to the shipping pallet.

4. Temporarily set Gate where indicated on site plans, transfer mounting hole location to foundation (or use template). Set Gate aside.

5. Use a masonry drill to provide the holes for the mounting bolts (4 – 3/8" X 4" long). If appropriate for your application use lag shields (not provided).

6. Relocate the Gate and install the lag bolts using a flat and lock washer on each.

7. Locate gearbox breather vent and remove plug. Vent hole faces upwards when the box is in operation.

8. Install Gate Arm.

Wiring

As indicated above, the Gate will function using a wide variety of control inputs. Consult the architectural plans for the required control functions, and then refer to the specific Delta Scientific Application Guide that covers that function. Common to all hookups:

1. Standard Power input is 120/1/60 VAC for Gate Motor and control power. The AG812 may be ordered from the factory equipped to operate at 240/1/50 also. Conduit should be run from below grade to the center stub-up area as shown in the installation drawing. Field wiring connections are terminated at terminals L1 (hot) and L2 (neutral). Other input voltages are available, and must be selected at time of order. The unit should be grounded at the provided terminal (green).

2. Gate Auto-Manual: With the Power 'On', switching the Auto-Manual switch to 'Manual' will vend (raise) the Gate. To reset the Gate, switch Auto-Manual to 'Reset' position momentarily.

3. Heater On-Off –Auto: Gate may be optionally supplied with a 60 watt heater to guard against condensation on the gate interior surfaces and to provide some heating to reduce gear box lube oil viscosity in extreme cold. We suggest that the heater switch be placed in the 'Auto' position at all times.

Limit Switch Adjustment

The Limit Switches are preset at the factory for standard operation across a level lane. The limit switches are adjustable to allow gate arm travel adjustments, where necessary.

CAUTION: Do NOT attempt to adjust the limit switches with the power on. Power switch must be placed in the 'Off' Position before adjustments are made. The directions indicated below are made when viewing the Gate from the gate arm side, Gate raise direction is clockwise (CW), Gate lower direction is counter-clockwise (CCW).

1. To adjust the gate arm for more downward travel, loosen the thumb screw on the down limit switch cam and rotate slightly CW. Tighten screw, turn Power switch 'On' and check by operating the Auto-Manual switch. Turn Gate 'Off' and re-adjust as necessary.

2. To adjust the gate arm for less downward travel, loosen the thumbscrew on the down limit switch cam and rotate slightly CCW. Confirm as above.

3. To adjust the gate arm for more upward travel, loosen the thumbscrew on the up limit switch cam and rotate slightly CCW, Confirm as above.

4. To adjust the gate arm for less upward travel, loosen the thumbscrew on the up limit switch cam and rotate slightly CW. Confirm as above.

Manual Gate Arm Operation (Standard Feature):

CAUTION: Do NOT manually operate gate unless power has first been turned off! There is potential for sever injury if power is restored while manually operating gate.

All AG812 Gates have the capability to be manually raised or lowered. The normal method to manually raise or lower the gate arm's position is to:

1. Unlock the access cover.

2. Set the 'POWER' Toggle Switch to 'OFF'.

3. Move the drive belt around by hand, thereby moving the gate arm either up or down as desired. Use care! Having the hand caught between the pulley and belt is painful!

Manual Gate Arm Operation (Optional):

The AG812 can be ordered with a manual crank to perform manual operation. The Gate's top cover is fitted with a plastic plug, which when removed will allow the crank assembly to be used to rotate the special sheave on the motor shaft.

Drive Belt Tension:

The drive belt requires periodic tension checking. Improper tension of the drive belt can result in erratic gate arm motion. See Troubleshooting Section.

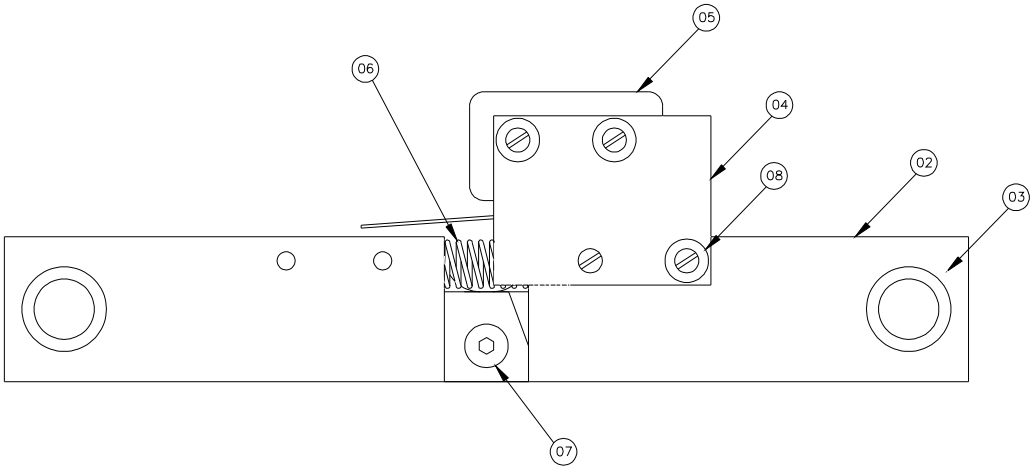
Spare Parts Order Data:

Parts for your Delta AG812 Gate may be purchased from your installer/dealer or the factory. Please call your dealer first, as he is most familiar with your application. Required replacement parts can be located from the attached Spare Parts List.

Try to supply as much data about the part as possible, i.e. dimensional size, threads, voltage, nameplate data, etc. For control circuits: list model number, serial number (S/N), drawing number and customer number taken from the nameplate on the controller.

Dart Arm (optional)

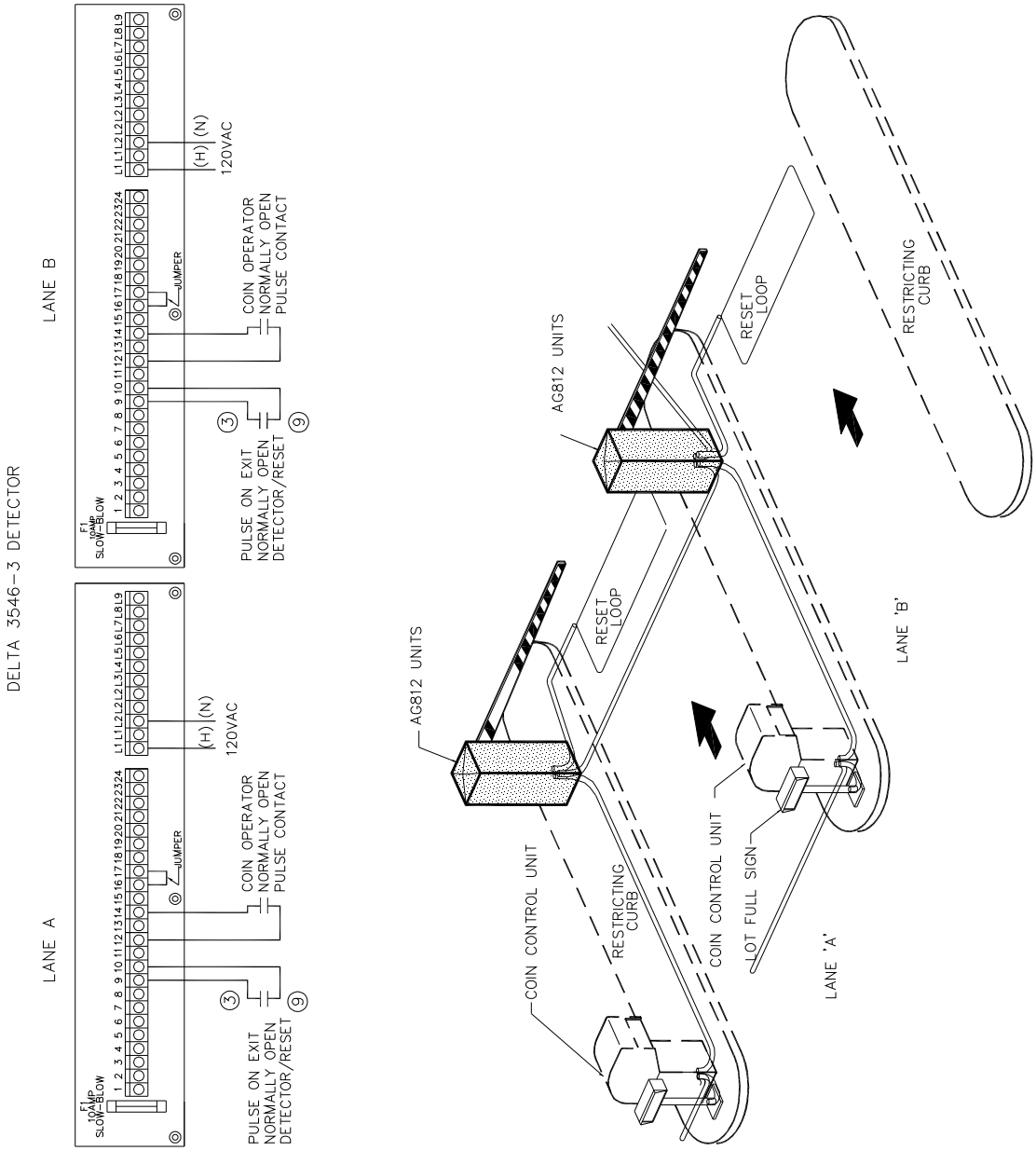
The dart arm is an optional, factory-installed device that will cause the AG812 gate arm to return to the vertical (open) position if the gate arm should encounter a solid object during the AG812's 'close' (reset) cycle. The dart arm kit includes an arm limit switch, which signals that the arm has come into contact with an object and also an additional shaft-mounted limit switch, which must be wired in series with the down limit switch to prevent intentional lifting of the gate arm and there by causing the arm to rise.



ASSY.	ITEM	REQ'D	DESCRIPTION	STK. NO.
01		1	CONNECTING ARM ASSEMBLY, DART STYLE	3312-00
	02	2	CONNECTING ARM LINK, .62" X 1.5" BAR X 5.34" LG.	3312-01
	03	2	FLANGED BUSH, .625 ID FF843, BRONZE	3312-02
	04	1	SWITCH TAB 1.75" X 2.25" X 16 GA.	3312-03
	05	1	SWITCH W/COVER	3312-04
	06	1	SPRING	3312-05
	07	1	5/16-18 UNC SOCKET HD. SHOULDER BOLT W/NUT	3312-06/07
	08	4	6-32 X 1.00" LG MACHINE SCREW W/2 FLAT WASHER/NUT	3312-08/10

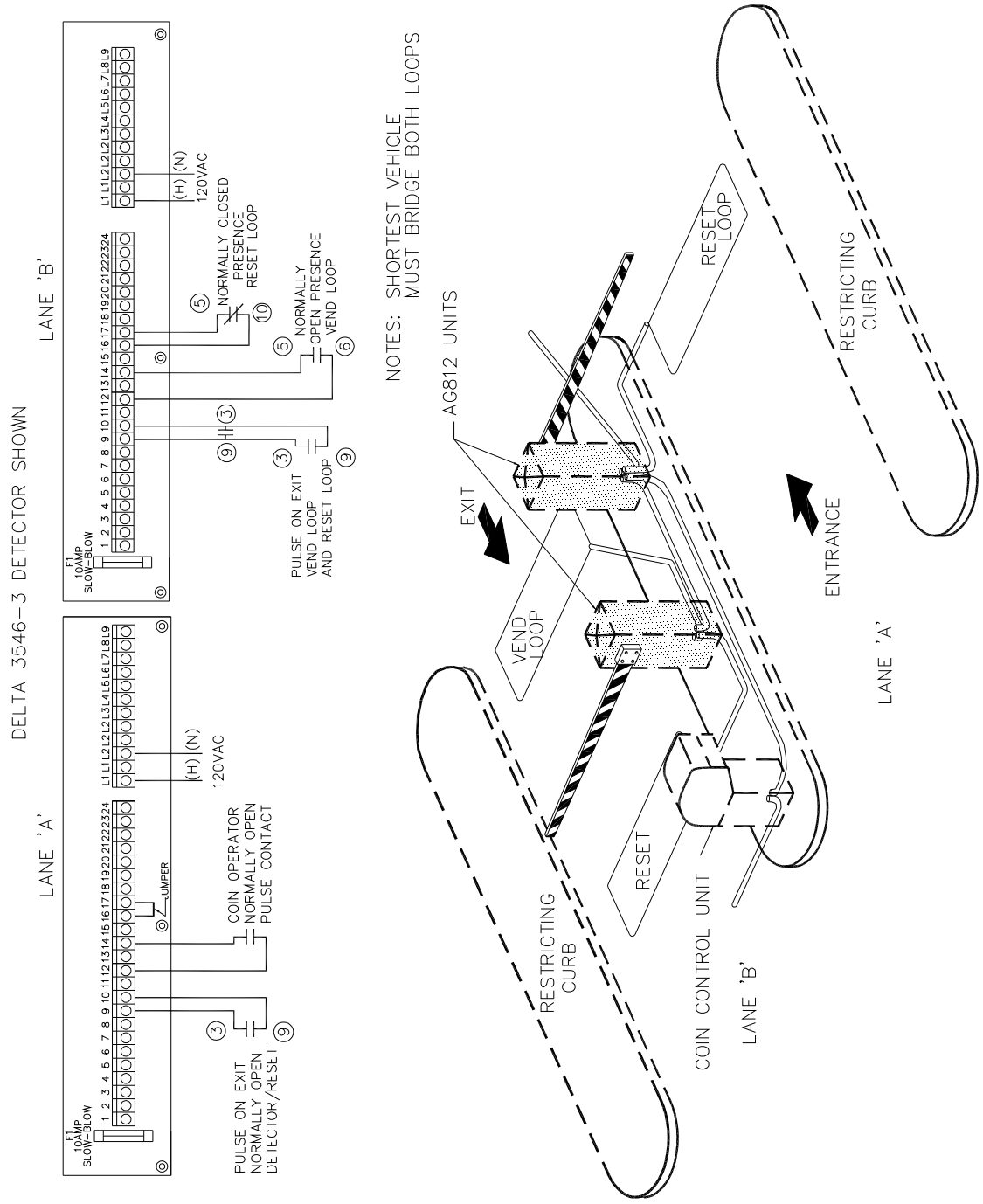
HOOK–UP SCHEMATIC DIAGRAM

1. 2–Lane, Single Direction, Cash In –or– Cash Out Operation



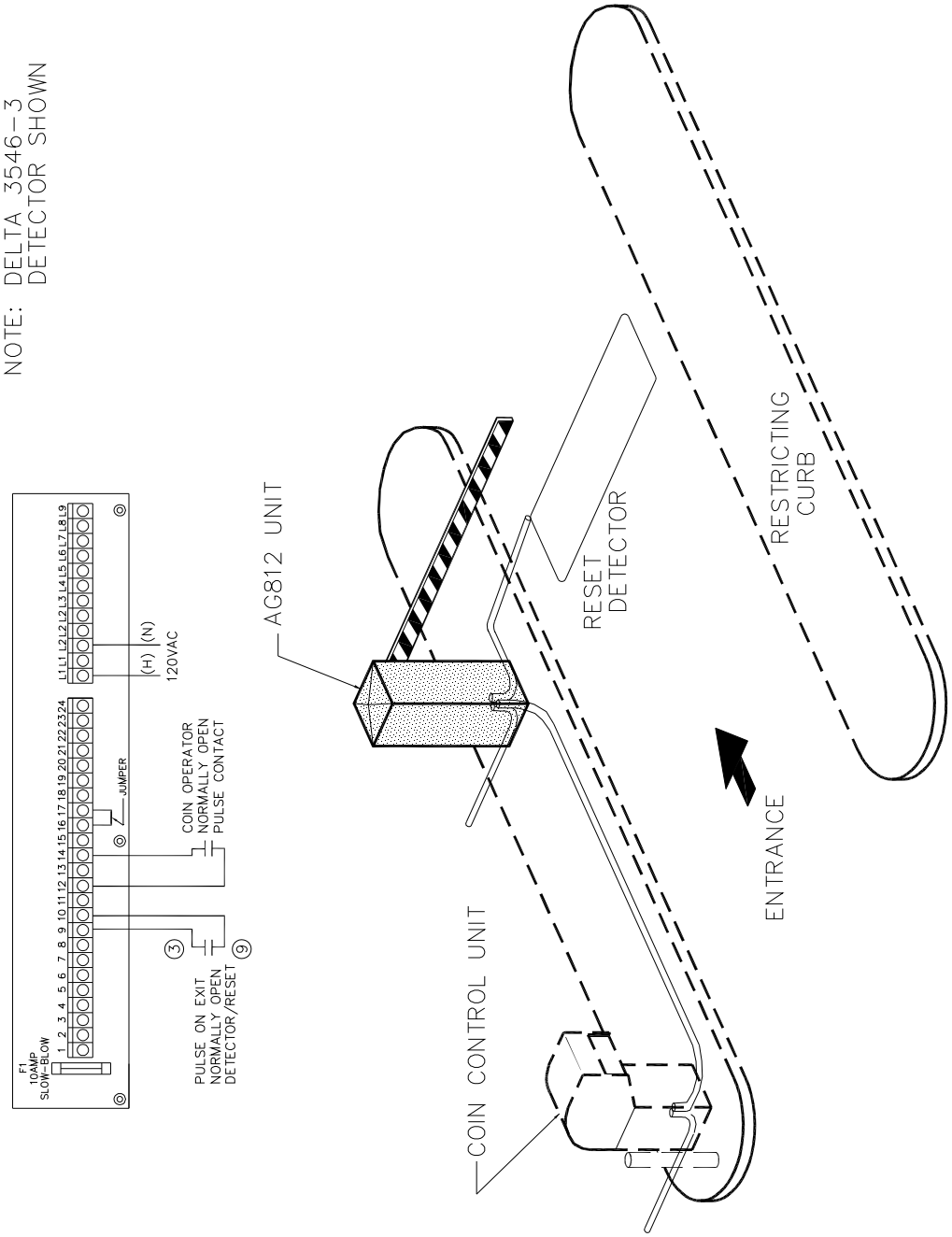
HOOK–UP SCHEMATIC DIAGRAM

2. 2–Lane Cash Entry, Free Exit Operation:



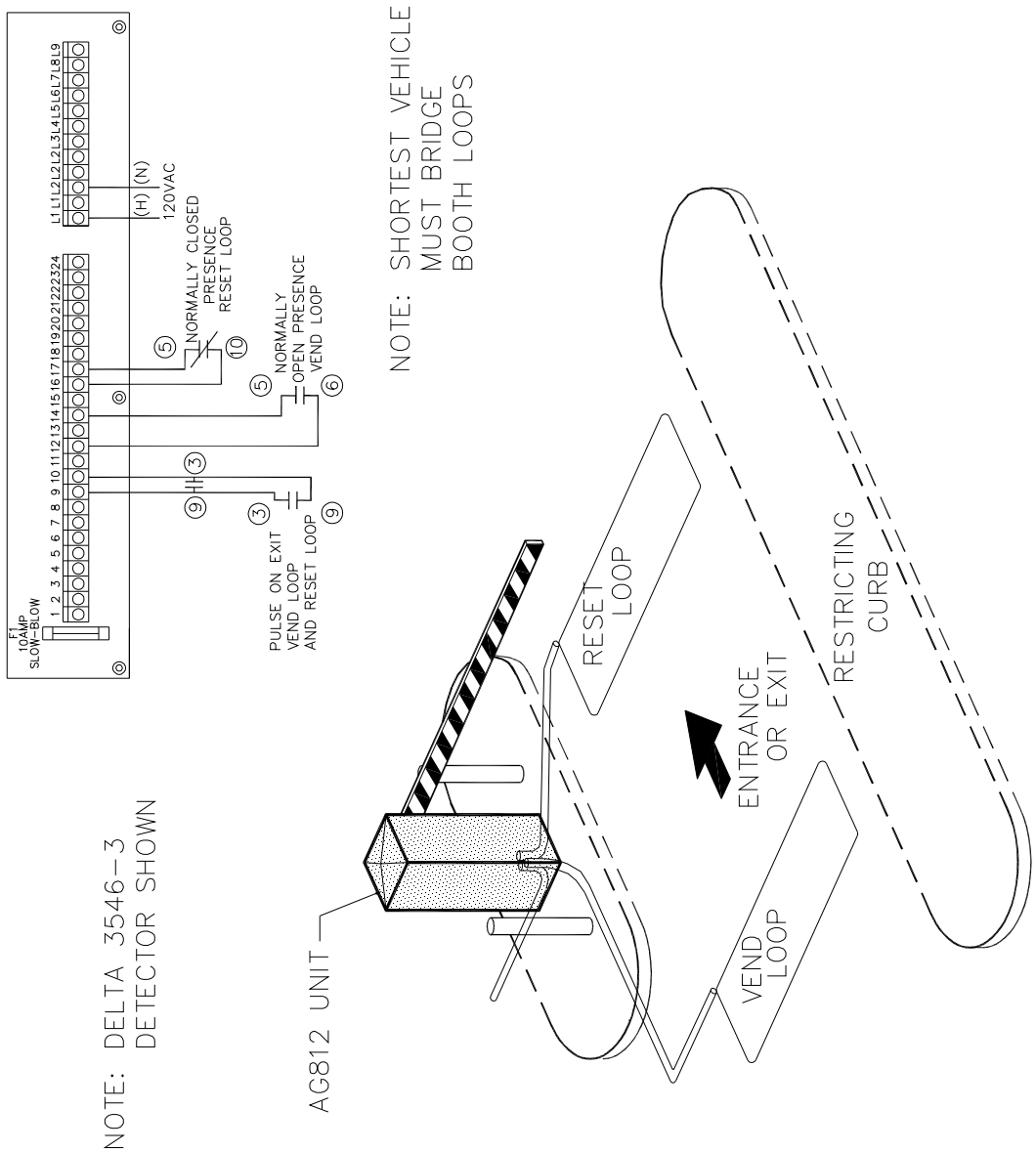
HOOK–UP SCHEMATIC DIAGRAM

3. 1–Lane Single Direction, Coin Unit– Barrier Gate Operation



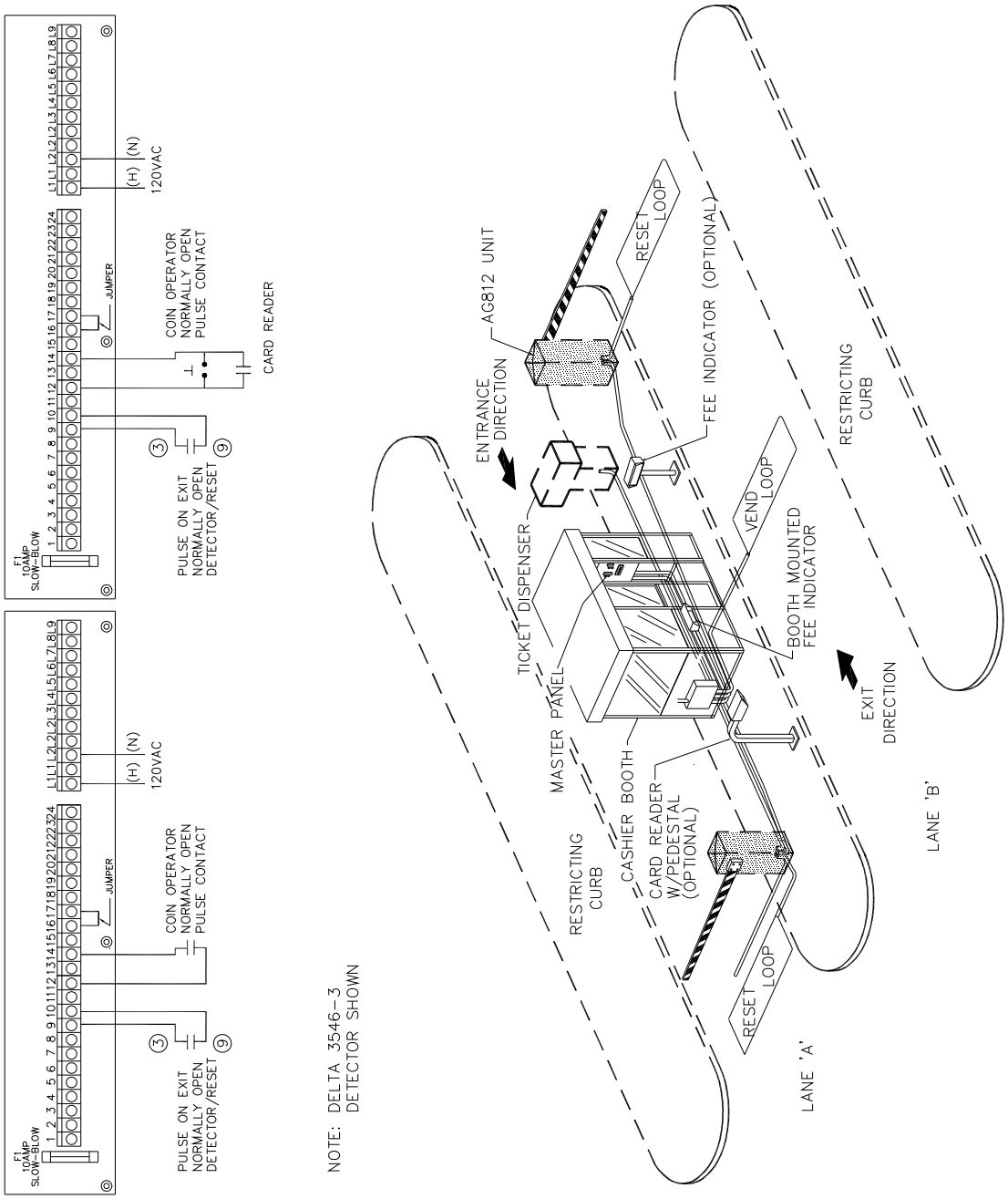
HOOK–UP SCHEMATIC DIAGRAM

4. 1–Lane Single Direction, Free in – or – Free Out Operation



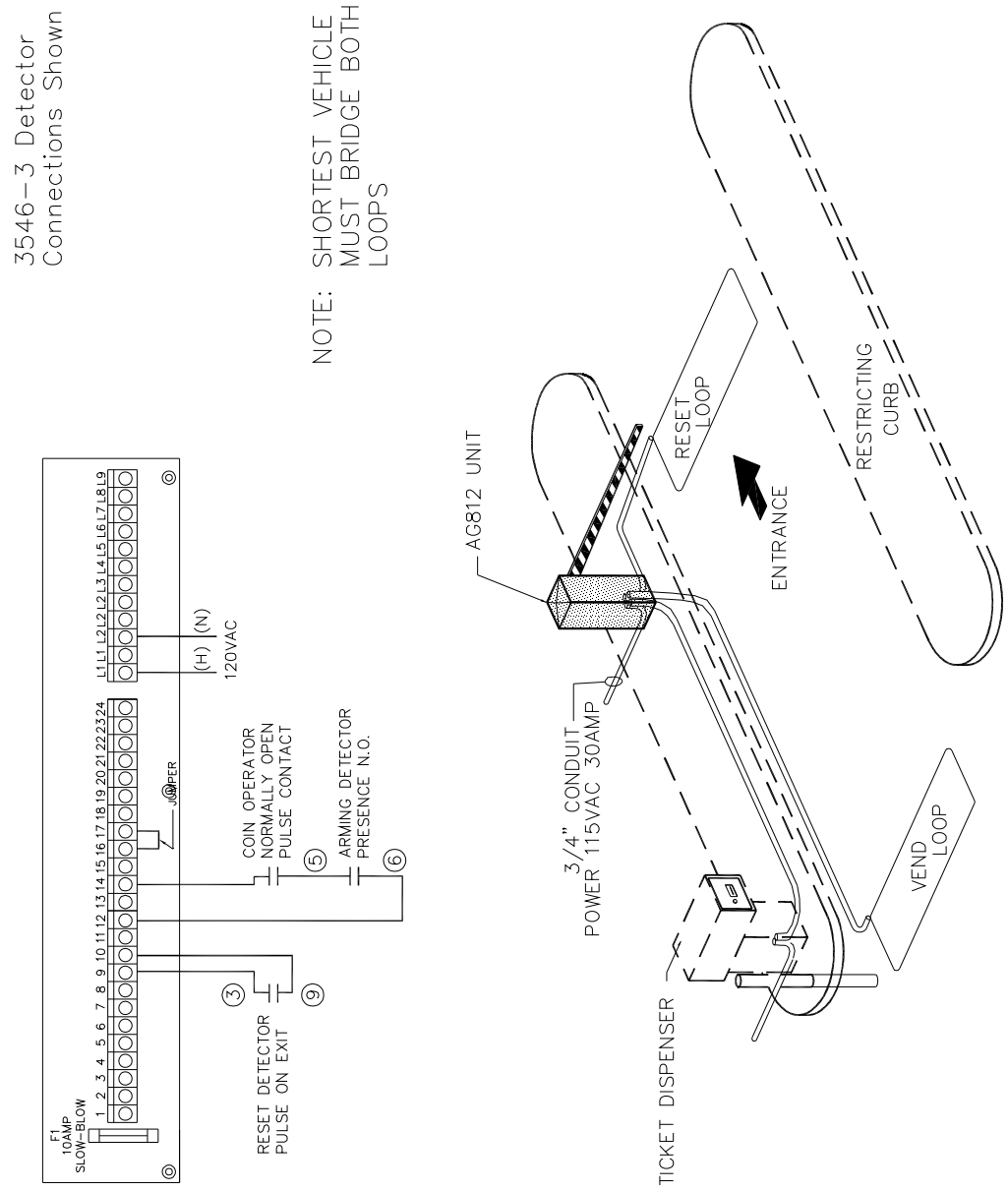
HOOK–UP SCHEMATIC DIAGRAM

5. Entrance & Exit Lanes with Revenue Equipment, Ticket Dispenser & Kiosk Operation



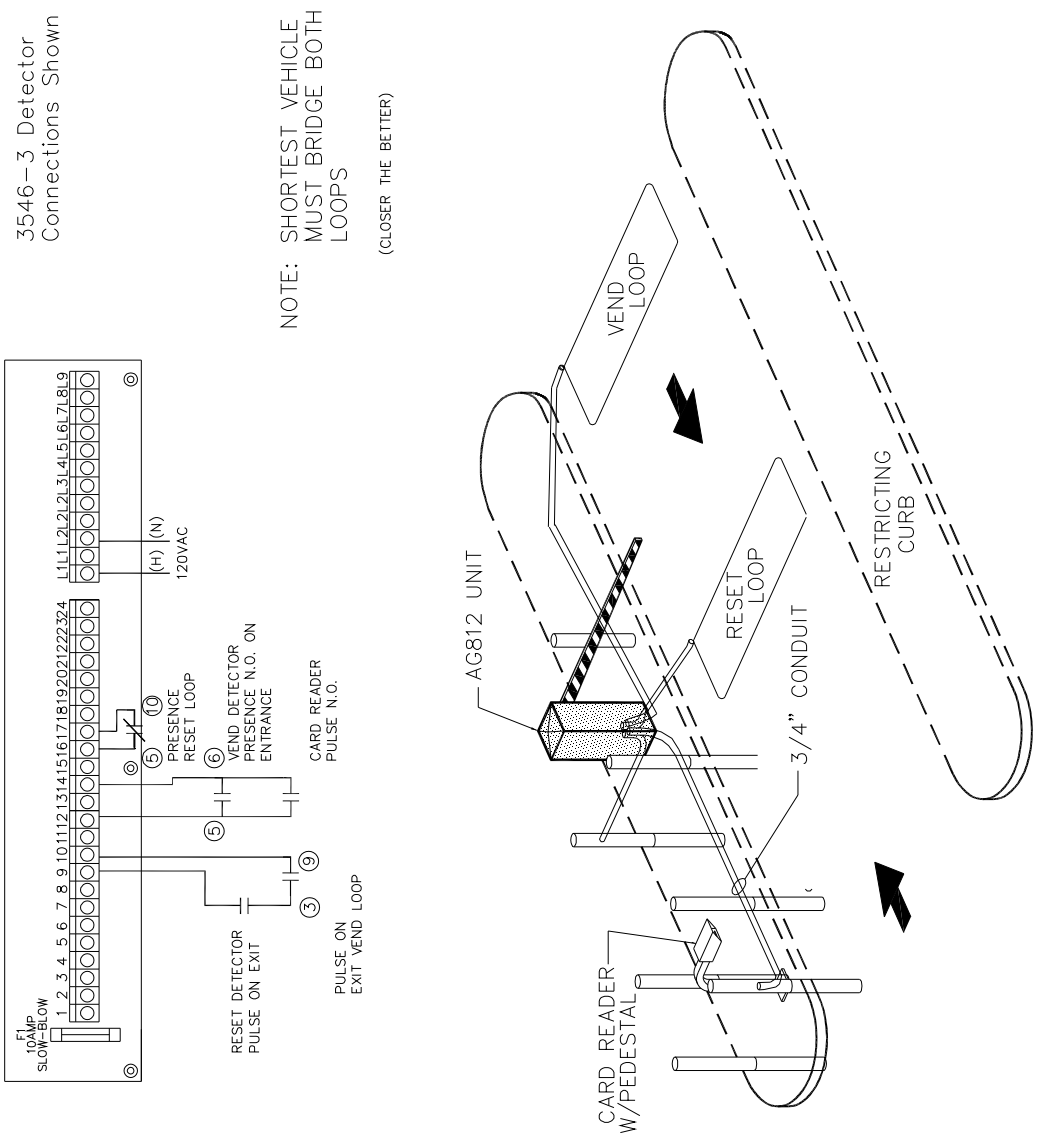
HOOK–UP SCHEMATIC DIAGRAM

6. Typical Ticket Dispenser/Gate Operator



HOOK–UP SCHEMATIC DIAGRAM

7. Card In – Free Out Operation



Maintenance

Good maintenance is essential to the long life of your Delta AG812 Access Gate. Long, trouble free operation is obtained by adhering to the following suggestions:

1. Check belt tension every 60 days to control Gate over travel. Consistent tension will allow the gate to stop in the same position every time.

2. Adjust limit switches (See section above) for proper gate arm travel if extremes in temperature are encountered. In cold weather, gearbox lubrication will stop arm travel in a shorter time. Lengthening the travel may be necessary. Conversely, in summer, hot temperatures may cause the gate arm to over travel the desired position. Shortening the travel can compensate.

CAUTION: Do NOT attempt to adjust the limit switches with the power on. Power switch must be placed in the 'OFF' position before adjustments are made.

1. Service the gearbox annually by draining old oil and refilling with clean Texaco Vanguard oil or equivalent.

2. Tighten all nuts, bolts, and screws on the Gate assembly every 60 days or as necessary.

3. Wash and wax the Gate cabinet exterior, once a quarter, or as necessary to maintain the bright gloss finish of your Delta Gate.

Troubleshooting

If Gate fails to move:

1. Check Gate 'Power' switch. Switch must be in the 'ON' position.

2. Check thermal overload on motor. If overload is tripped, reset by pushing trip button. If motor is hot, let it cool before trying to reset.

CAUTION: Power switch should be in the 'OFF' position when resetting the thermal trip to prevent hands from being caught in the drive belt pulleys if motor should happen to start on reset.

1. Check circuit breaker/disconnect feeding the Gate. Reset as necessary.

2. If there is power to the Gate (120/1/60 at terminal 1 and terminal 2):

A. Try switching the 'AUTO-MANUAL' switch to 'MANUAL'. The gate arm should go up. If not, turn Power switch 'OFF' and disconnect Gate at the Main. Check all electrical connections (terminals and screws) for tightness. If Gate still will not function when power is restored, call factory for assistance.

i) If Gate functions on ‘Manual’ but does not respond to vend or reset signals; check control devices and detectors. When possible, exchange known good components for suspected ones.

ii) If control devices and detectors are proved OK, the field wiring or harnesses are to be suspected. Call factory for help.

B. If Gate runs but cycles up and down without stopping:

i) Check limit switch adjustment per the above instructions.

ii) If the limit switches are in their proper location, at least one switch is likely failed. If the Gate runs on with the 'AUTO-MANUAL' switch in the ‘MANUAL’ position the UP limit switch has failed. If the Gate runs on in the ‘Auto’ position the DOWN limit switch is failed.

If gate moves erratically:

Erratic gate motion requires the drive belt tension to be checked. Open the AG812’s door and inspect the drive belt for looseness or excessive wear. If the belt appears worn or frayed, or if the belt appears loose, first: remove Electrical Power to the gate and second, tighten or replace the belt with a new one. To remove or tighten the belt, first loosen the Electrical Motor mounting nuts slightly and pull the motor away from the Gear Reducer, then tighten the Electrical, motor mounting nuts, thus tightening the drive belt.

Power Loss

The Delta AG812 can be opened or closed in the event of a power outage by the following:

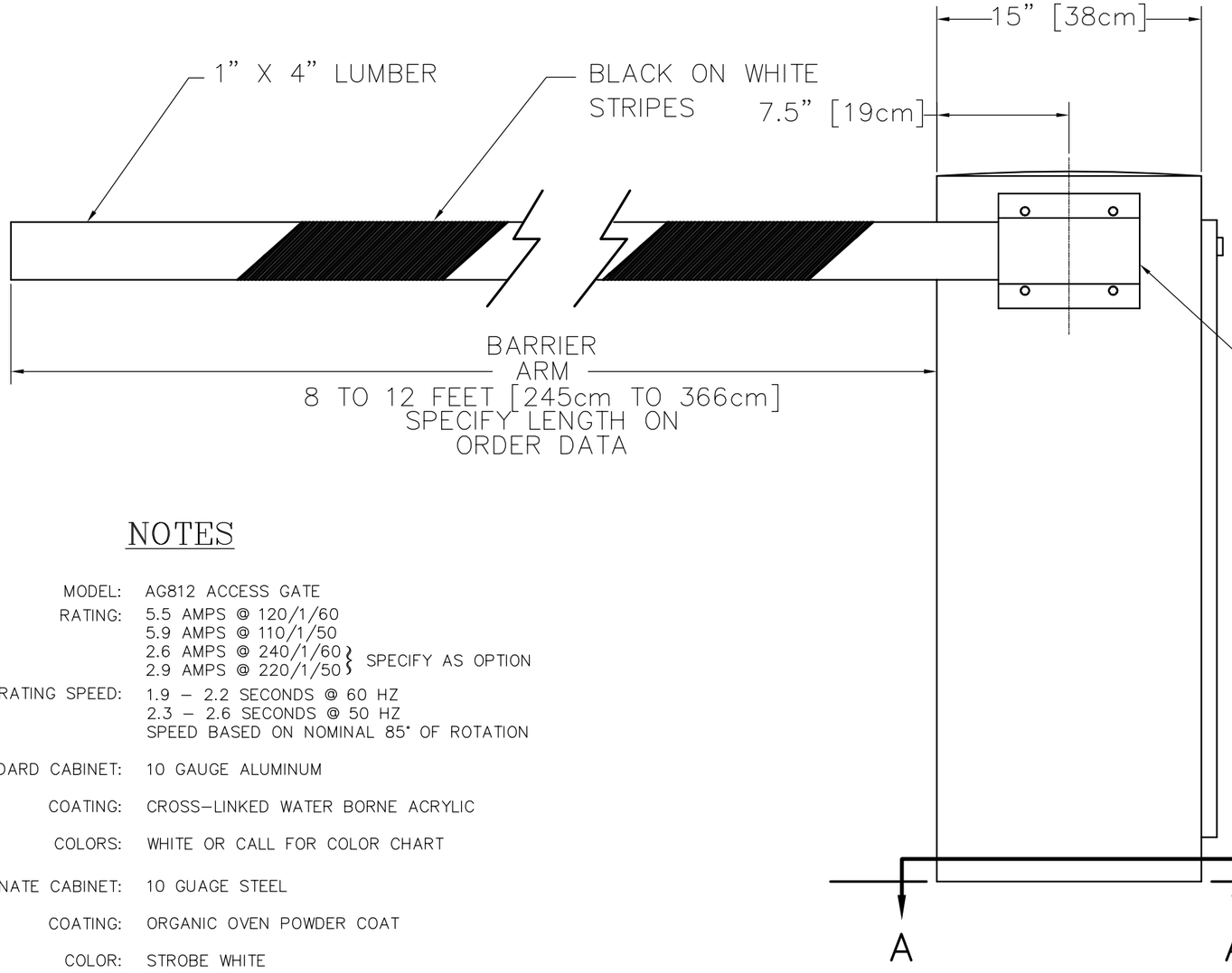
CAUTION: Power switch should be in the ‘Off’ position when manually operating the gate to prevent hands from being caught in the drive belt pulleys if motor should happen to start if power is restored.

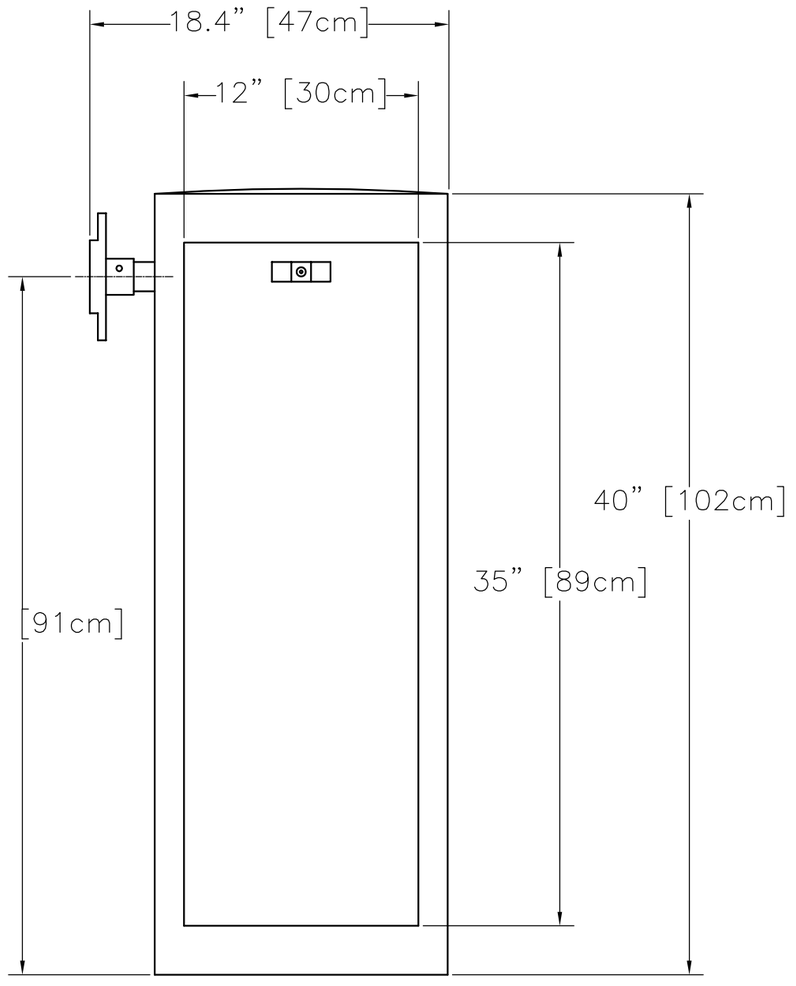
1. Manually pull the drive belt around until the gate is in the desired position. Use Care! Drive belt-pulley is a pinch point!

2. Turn Auto-Manual switch to ‘AUTO’ and the Power switch to ‘ON’. On power resumption, the Gate will automatically resume powered operation.

AG812 ACCESS GATE – SPARE PARTS

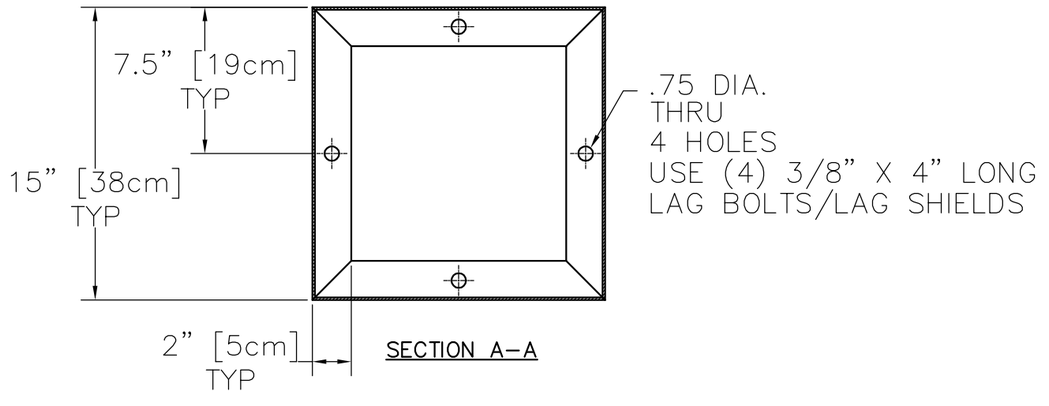
4369-01A	ALUMINUM CABINET ASSEMBLY (Door Sold Separately)
4369-02A	ALUMINUM CABINET DOOR ONLY
4369-03	KEY LOCK FOR CABINET DOOR
4369-04	GEAR BOX, 60:1
4369-05	MOTOR, 1/2 HP - 120/1/60
4369-05A	MOTOR, 1/2 HP - 240/1/50
4369-06	SHEAVE, 2.0 O.D. - CA200-5/8
4369-07	SHEAVE, 5.0 O.D. - CA500-3/4
4369-08	SHAFT KEY, 3/16 SQUARE x 1.38" LONG
4369-09	DRIVE BELT - 4L230
4369-10	MAIN ARM SHAFT ASSEMBLY
4369-11	BEARING PLATE with BUSHING FOR AG812
4369-12	SHAFT COLLAR - 1.25" BORE
4369-13	ARM HOLDER
4369-14	ARM HOLDER RETAINING PLATE
4369-15	CONNECTING ARM with BUSHING
4369-16	GEAR BOX MOUNTING PLATE
4369-17	MOTOR MOUNTING PLATE
4369-18	LIMIT SWITCH CAM
4369-19	LIMIT SWITCH
4369-20	ARM HOLDER DRIVE PIN - 5/16 x 1.75" LONG
4369-21	SHOULDER BOLT - 5/8 x 1-1/4" LONG
4369-36	BUSHING, FLANGED BRONZE - FF843/.625 I.D.
4369-37	HARNESS ASSEMBLY, MOTOR
4369-38	HARNESS ASSEMBLY, LIMIT SWITCH and DART
4369-39	HARDWARE KIT (Includes part no.'s: 4369-22 - 4369-35)
7579-00	CIRCUIT BOARD, NO ENCLOSURE – 120/1/60
7761-10	CIRCUIT BOARD WITH ENCLOSURE - 120/1/60
7761-20	CIRCUIT BOARD W/ ENCLOSURE & HEATER - 120/1/60





NOTES

MODEL:	AG812 ACCESS GATE
RATING:	5.5 AMPS @ 120/1/60 5.9 AMPS @ 110/1/50 2.6 AMPS @ 240/1/60 } SPECIFY AS OPTION 2.9 AMPS @ 220/1/50 } SPECIFY AS OPTION
OPERATING SPEED:	1.9 – 2.2 SECONDS @ 60 HZ 2.3 – 2.6 SECONDS @ 50 HZ SPEED BASED ON NOMINAL 85° OF ROTATION
STANDARD CABINET:	10 GAUGE ALUMINUM
COATING:	CROSS–LINKED WATER BORNE ACRYLIC
COLORS:	WHITE OR CALL FOR COLOR CHART
ALTERNATE CABINET:	10 GUAGE STEEL
COATING:	ORGANIC OVEN POWDER COAT
COLOR:	STROBE WHITE
SHIPPING WEIGHT:	STEEL = 190 POUNDS ALUMINUM = 130 POUNDS
APPROVALS:	UNDERWRITERS LABORATORIES INC. LISTED 5J07 GATE OPERATOR, 120/1/60 ONLY
ACCESSORIES:	SPECIFY AS REQUIRED 120 VOLT UNITS ONLY, TWO 125V, 60HZ, 15AMP RECEPTACLES, 10AMPS MAXIMUM. 60 WATT ANTI–CONDENSATION HEATERS DART FUNCTION – (AUTOMATIC REVERSE MECHANISM) OTHER OPTIONS AVAILABLE



REV.	DESCRIPTION	DRWN BY	DATE	APPVD BY	DATE
D	ECO #2004–003	JNF	01/08/04		
C	REVISED TITLE BLOCK	JNF	02/17/99		
B	CORRECTED SPEEDS, STD CABINET	S.K.	05/16/94		
A	ADDED ALUMINUM CONSTRUCTION	S.K.	03/01/93		

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES

TOLERANCES
.X = ±.060/FT
.XX = ±.030/FT
.XXX = ±.010/FT
ANGLES = ±.5°

SURFACE FINISH 125

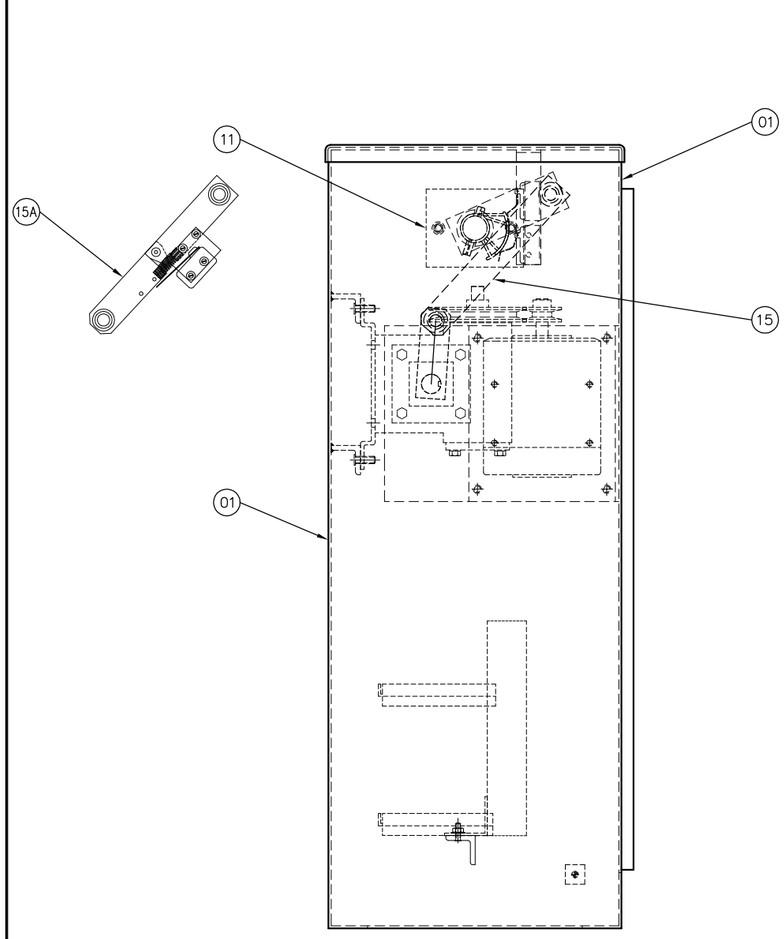
REMOVE ALL BURRS & BREAK SHARP EDGES .02 MAX

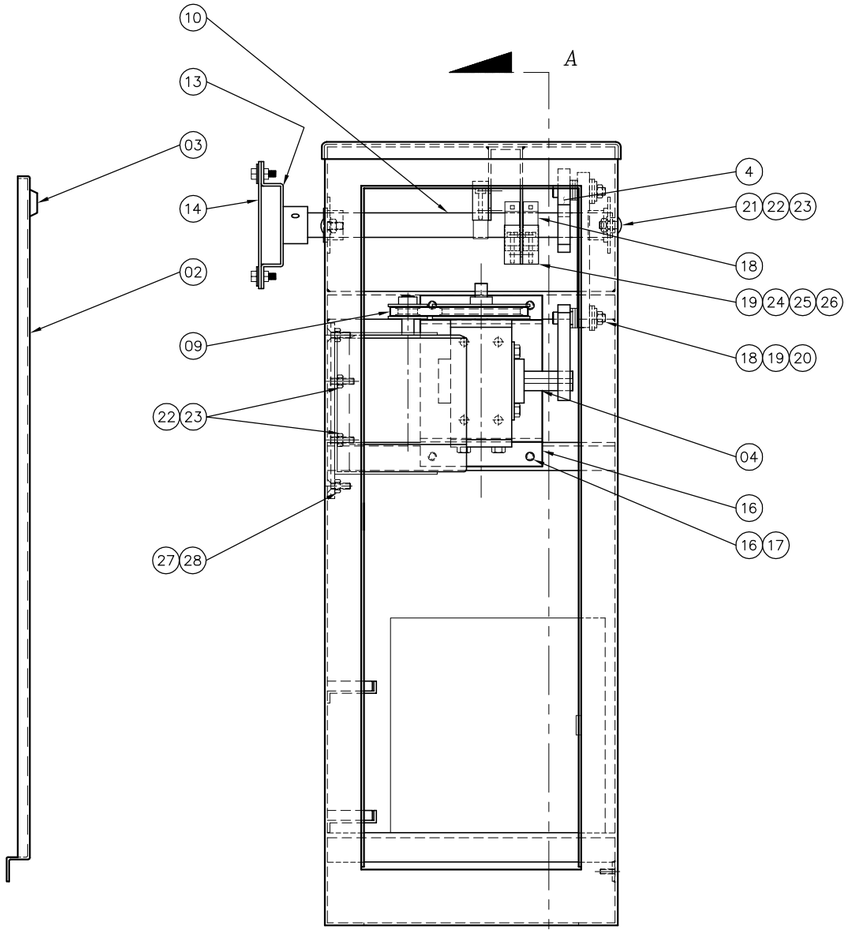
DELTA SCIENTIFIC CORPORATION
24901 WEST AVE. STANFORD
VALENCIA, CA 91355 U.S.A.
(805) 257–1800 FAX (805) 257–0617

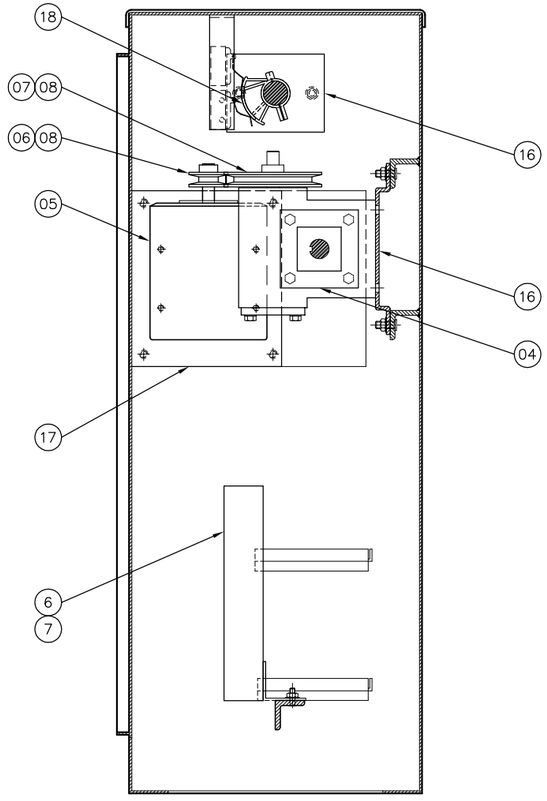
MODEL AG812 ACCESS GATE
GENERAL ARRANGEMENT

DRWN BY	DATE	DRAWING NO.	REV.
D.G.	01/18/90	AG812–xxx	D
CHKD BY	DATE		
APPVD BY	DATE	SCALE: 1:4 (D SIZE)	SHEET 1 OF 1

ITEM	REQ'D	DESCRIPTION/MATERIAL	WT EA	TOT WT	REF NO
1	1	AG812 CABINET ASSEMBLY	43.3	43.3	4369-01A
2	1	AG812 CABINET DOOR LESS LOCK			4369-02A
3	1	T-HANDLE DOOR LOCK AND KEY			4369-03
4	1	GEAR BOX W/CRANK ARM, 60:1 RATIO	#REF!	#REF!	4369-04
5	1	MOTOR, 1/2 HP, VOLTAGE AS ORDERED	12.0	12.0	2464-XX
6	1	SHEAVE, 2" O.D., CA200-5/8	0.8	0.8	4369-06
7	1	SHEAVE, 5" O.D., CA500-3/4	0.3	0.3	4369-07
8	2	SQUARE KEY, 3/16" x 1.38" LG			4369-08
9	1	BELT, 4L230			4369-09
10	1	MAIN ARM SHAFT ASSEMBLY			4369-10
11	2	BEARING PLATE WITH BUSHING			4369-11
12	1	SHAFT COLLAR - 1.25 INCH BORE			4369-12
13	1	GATE ARM HOLDER			4369-13
14	1	GATE ARM HOLDER RETAINING PLATE			4369-14
15	1	CONNECTING ARM WITH BUSHINGS			4369-15
15A	1	DART CONNECTING ARM ASSY. (OPTION)	5.7	5.7	3312-00
16	1	GEAR BOX MOUNTING PLATE			4369-16
17	1	MOTOR MOUNTING PLATE			4369-17
18	2	LIMIT SWITCH CAM			4369-18
19	2	LIMIT SWITCH			4369-19
20	1	GATE ARM HOLDER ROLL PIN 5/16" X 1.75" LG			4369-20
21	2	SHOULDER BOLT, 5/8 x 1-3/4" LONG			4369-21
22	2	FLAT WASHER, 5/8			WAS58
23	2	NUT, NYLOCK, 1/2-13			NUT1213NY
24	4	BOLT, 6-32 x 1.25 LONG	-	-	4369-24
25	4	NUT, 6-32	0.1	0.2	4369-25
26	4	FLAT WASHER, #6	0.1	0.1	4369-26
27	4	CARRIAGE BOLT, 5/16-18 x 1.0 LONG	#REF!	#REF!	4369-27
28	8	NUT, 5/16-18	0.1	0.5	4369-28
29	8	LOCKWASHER, 5/16	0.1	0.5	4369-29
30	8	NUT, 3/8-16	#REF!	#REF!	4369-30
31	8	LOCKWASHER, 3/8	0.1	#REF!	4369-31
32	4	NUT, 7/16-14	#REF!	#REF!	4369-32
33	4	LOCKWASHER, 7/16	0.1	0.4	4369-33
34	1	DART CONNECTING ARM ASSY. (OPTION)	5.7	5.7	4369-34







SECTION A–A

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES

TOLERANCES
.X = ±.060/FT
.XX = ±.030/FT
.XXX = ±.010/FT
ANGLES = ±.5°

SURFACE FINISH
125

REMOVE ALL BURRS & BREAK SHARP EDGES .02 MAX

DELTA SCIENTIFIC CORPORATION
40355 DELTA LANE
PALMDALE, CA 93551 U.S.A.
(661) 575-1100 FAX (661) 575-1109

AG812 ACCESS GATE
COMPONENT ASSEMBLY

DRWN BY	DATE	DRAWING NO.	REV.
J.FRIEND	10-31-07	AG-PARTS	-
CHKD BY	DATE		
APPVD BY	DATE	SCALE: 1:4 (D SIZE)	SHEET 1 OF 1

K1-K8	RELAYS, MAGNECRAFT #W76EURCPCX-64	
LED 1-LED 11	RED EW #LT18111G	
R1-R9,R11,R13	RESISTOR, 2.2K OHM, 1/8W	
R10,R12	RESISTOR, 1.2K OHM, 1/2W	
R14,R15	RESISTOR, 330 OHM, 1/2W	
U1,U2	OPTO ISOLATOR, MOTOROLA #MOC3041	
CA	CAMDEN TERMINAL STRIP, FEMALE CTB 7300 24F/MALE CTB 7300 24F	
L	CAMDEN TERMINAL STRIP, FEMALE CTB 7300 12F/MALE CTB 7300 12F	
STAT	THERMOSTAT PEPI MODEL C, 24	
B1	BRIDGE DIODE, 1A 50V DIGI-KEY DB-101NP	
C1	CAPACITOR, 1000 mF 35V	
C2	CAPACITOR, 330 mF 35V	
U3,U4	MOTOROLA TRIAC, MAC223-10 / W HEAT SINK THERMALLOY #6073B	
U5	VOLTAGE REGULATOR, THOMPSOM MANUF., #L7824CV / W HEAT SINK THERMALLOY #6073B	
S1	TOGGLE SWITCH #179-652 ARCOLECTRIC	
S2	TOGGLE SWITCH #379-652 ARCOLECTRIC	
S3	TOGGLE SWITCH McGILL #0121-0015	

OPEN INTERNAL RELAY (1,9)

LOCK OUT RELAY (OPTION) (14)

OPEN OPTOISOLATOR

SIGNAL LIGHT/SYNCHRO RELAY (23,24,40,41)

OPEN SIGNAL RELAY (2,11)

REVERSE PAUSE RELAY AG812 DOWN TO UP (3)

CLOSED CONTROL RELAY (2,13,14)

MASTER / SLAVE OR LOCK OUT RELAY (OPTION) (13,42,43)

SYNCRO RELAY (OPTION) (9,10)

VOLTAGE REGULATOR

RECTIFIER

TRANSFORMER

MTC TO GATE SYNCRO OUTPUT (OPTIONAL)

TICKET SPITTER LOCK OUT K2 & K7 ARE REQUIRED (OPTIONAL)

SIGNAL LIGHT (OPTIONAL)

HEATER (OPTIONAL)

MOTOR 115 VAC 5.5 FLA

OUTLET

REV.	DESCRIPTION	DRWN BY	DATE	APPVD BY	DATE
C	ECO 2004-228	JNF	10/27/04		
B	ECO 2004-148	J.M.	7/7/04		
A	GENERAL UPDATE	R.R.	2-19-99		

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES

TOLERANCES
.X = ±.060/FT
.XX = ±.030/FT
.XXX = ±.010/FT
ANGLES = ±.5°

SURFACE FINISH 125

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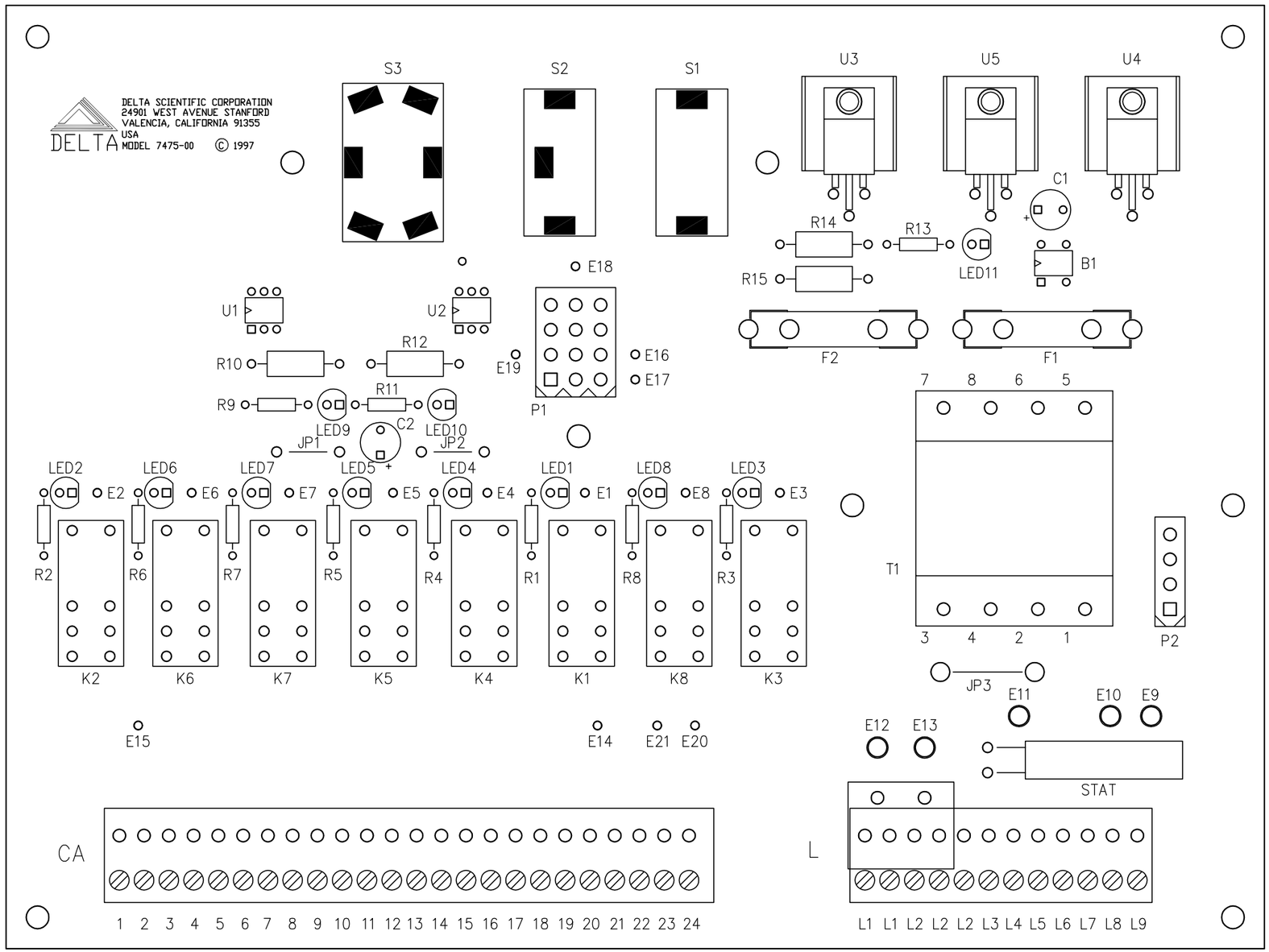
CIRCUIT BOARD & SCHEMATIC FOR AG812 ACCESS GATE

DRWN BY	DATE	DRAWING NO.	REV.
R.ROBREDO	03/22/98	7579	C
CHKD BY	DATE		
APPVD BY J.FRIEND	DATE 06/02/98	SCALE: NO SCALE	SHEET 1 OF 2



REV.	DESCRIPTION	DRWN BY	DATE	APPVD BY	DATE
C	ECO 2004–228	JNF	10/27/04		
B	ECO 2004–148	J.M.	7/7/04		

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CIRCUIT BOARD & SCHEMATIC FOR AG812 ACCESS GATE

DRWN BY	DATE	DRAWING NO.	REV.
R.ROBREDO	03/22/98	7579	C
CHKD BY	DATE		
APPVD BY J.FRIEND	DATE 06/02/98	SCALE: 2:1 (D SIZE)	SHEET 2 OF 2

ITEM	DESCRIPTION/MATERIAL	REF NO
1	PC-BOARD	
T1	TRANSFORMER MCI #4-05-2024	
F1	FUSE 1 AMP, SLOW BLOW	
F2	FUSE 10 AMP, SLOW BLOW	
P1	CONNECTOR, MOLEX 03092041/02091133	
P2	CONNECTOR, MOLEX 03092126/02091133	
K1-K8	RELAYS, MAGNECRAFT #W76EURCPCX-64	
LED 1-LED 11	RED EW #LT18111G	
R1-R9,R11,R13	RESISTOR, 2.2K OHM, 1/8W	
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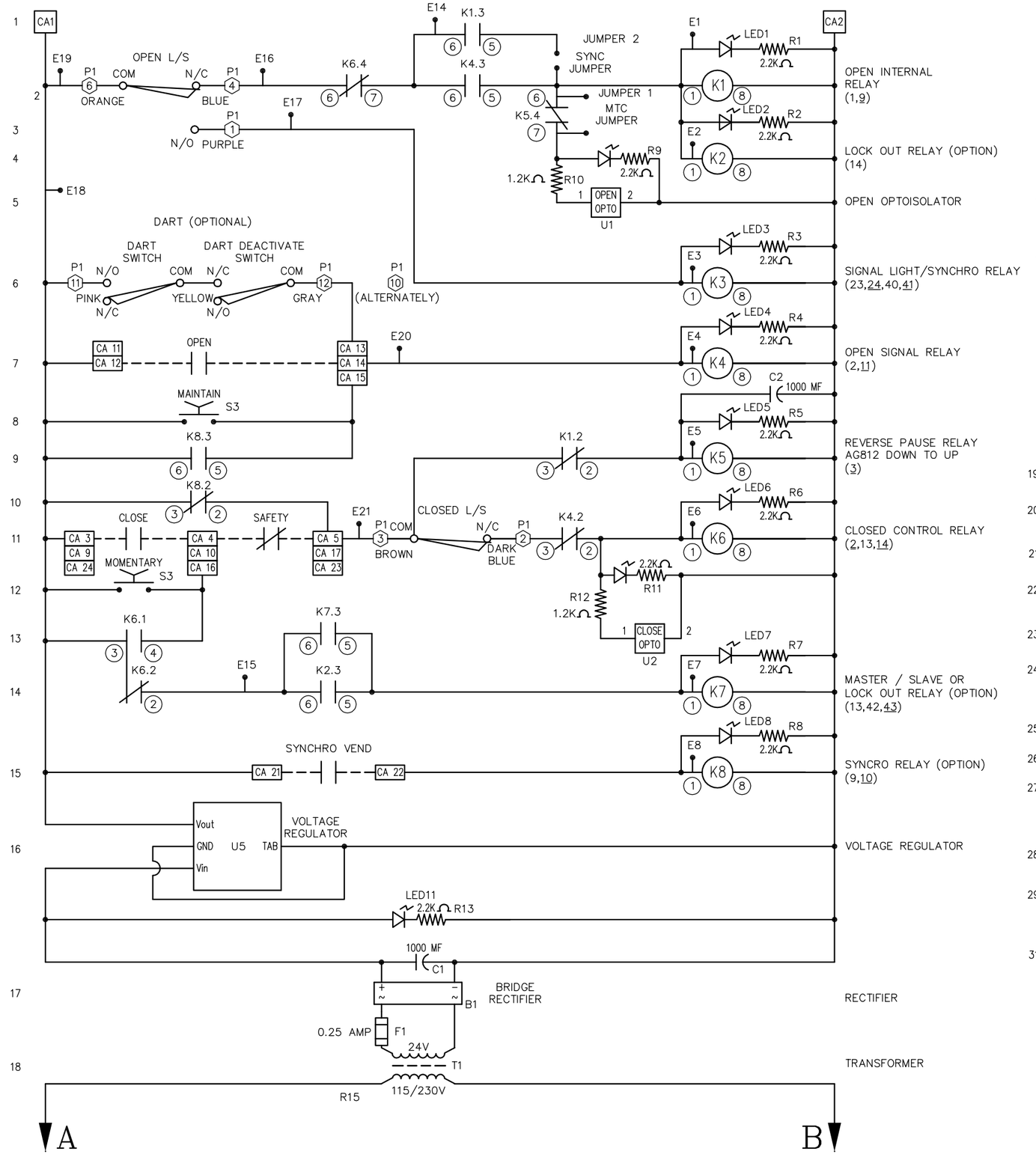
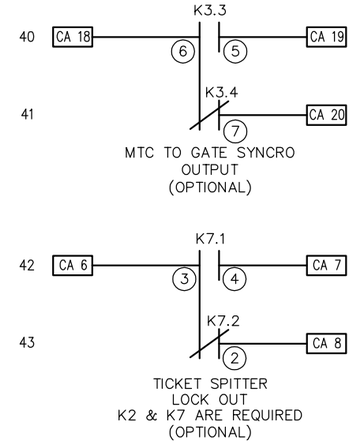
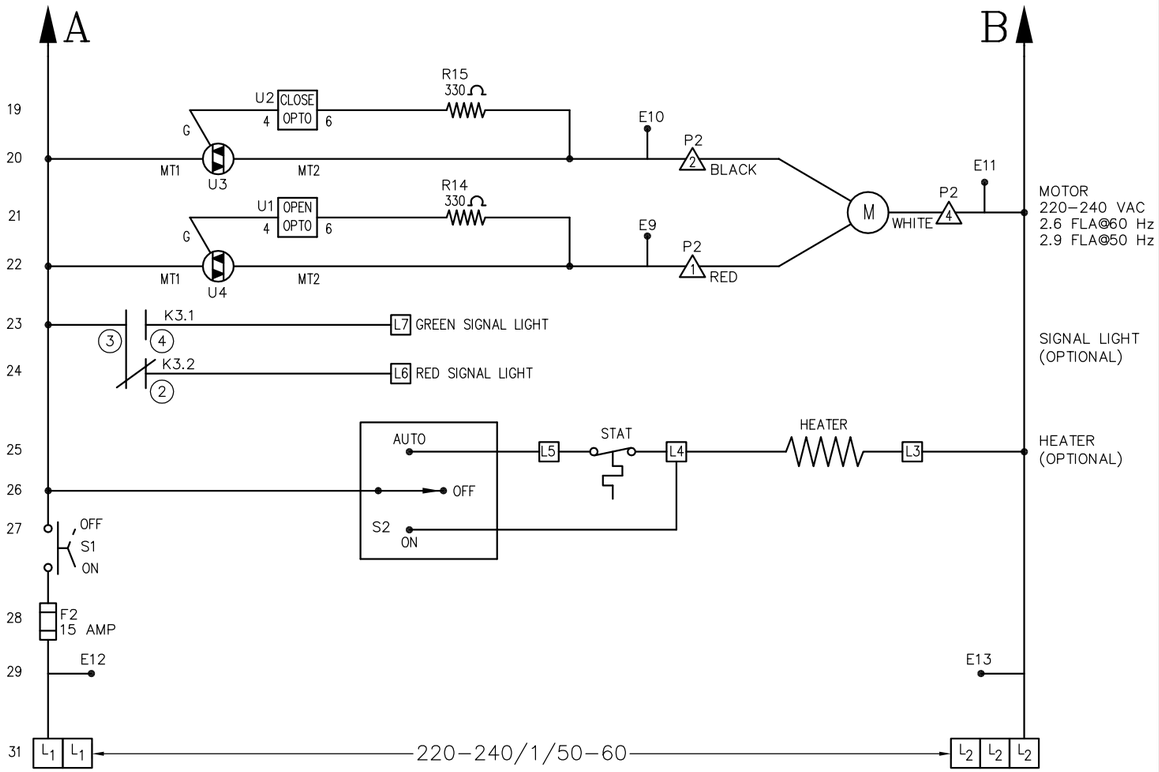
C1	CAPACITOR, 1000 MICRO-FARAD, 35V	
C2	CAPACITOR, 1000 MICRO-FARAD, 35V	
U3,U4	MOTORLA TRIAC, MAC223-10 / W HEAT SINK THERMALLOY #6073B	
U5	VOLTAGE REGULATOR, #7451 PCBA / W HEAT SINK THERMALLOY #6073B	
S1	TOGGLE SWITCH #179-652 ARCOLECTRIC	
S2	TOGGLE SWITCH #379-652 ARCOLECTRIC	
S3	TOGGLE SWITCH McGILL #0121-0015	







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A	ECO #2004–228	JNF	10/27/04		

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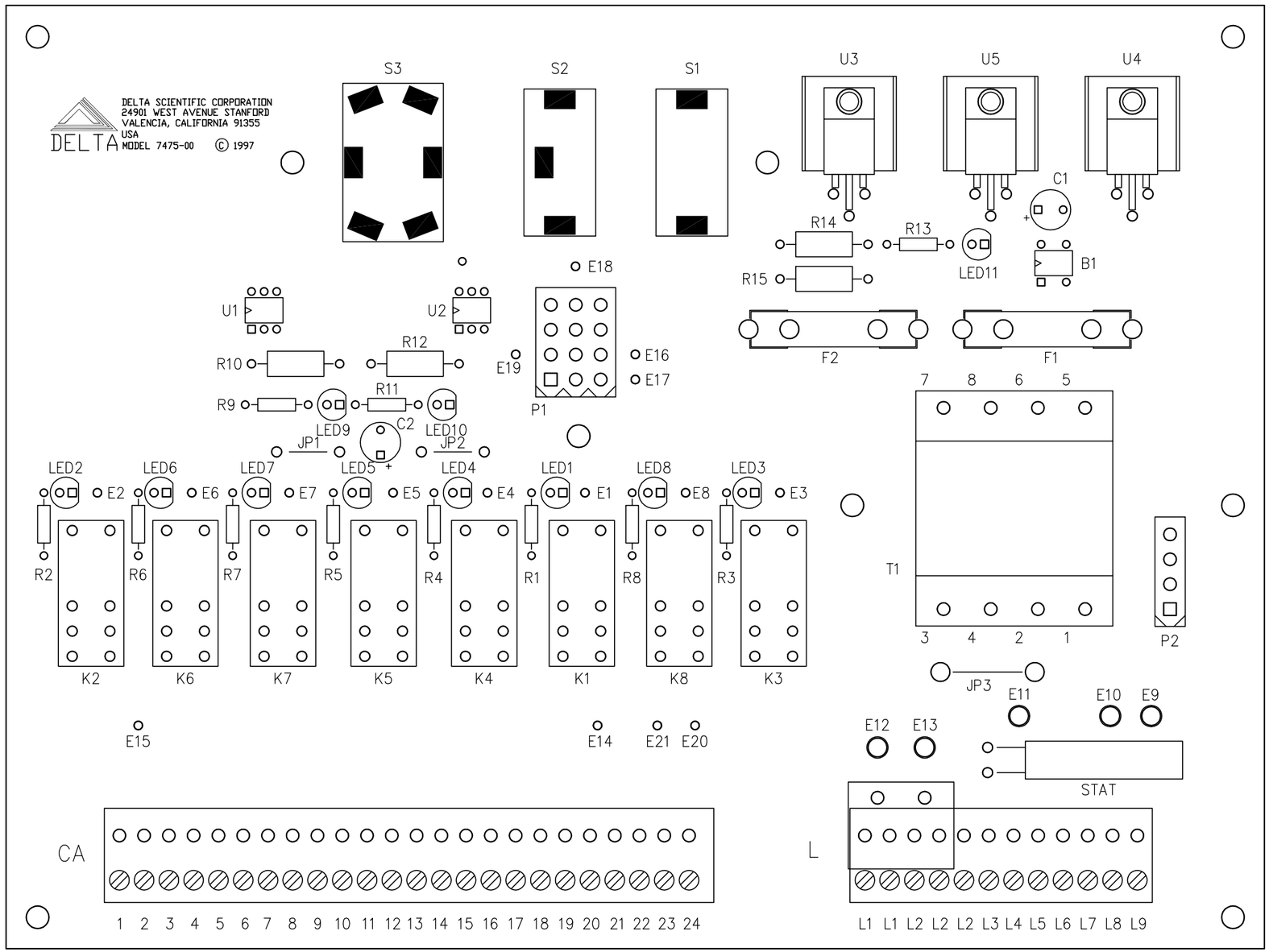
CIRCUIT BOARD & SCHEMATIC FOR AG812 ACCESS GATE – 220 VAC

DRWN BY	DATE	DRAWING NO.	REV.
J.FRIEND	03/22/98	7808	A
CHKD BY	DATE		
APPVD BY J.FRIEND	DATE 06/02/98	SCALE: NO SCALE	SHEET 1 OF 2



REV.	DESCRIPTION	DRWN BY	DATE	APPVD BY	DATE
A	ECO #2004–228	JNF	10/27/04		

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SURFACE FINISH
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CIRCUIT BOARD & SCHEMATIC FOR AG812 ACCESS GATE – 220 VAC

DRWN BY	DATE	DRAWING NO.	REV.
J.FRIEND	03/22/98	7808	A
CHKD BY	DATE		
APPVD BY J.FRIEND	DATE 06/02/98	SCALE: 2:1 (D SIZE)	SHEET 2 OF 2