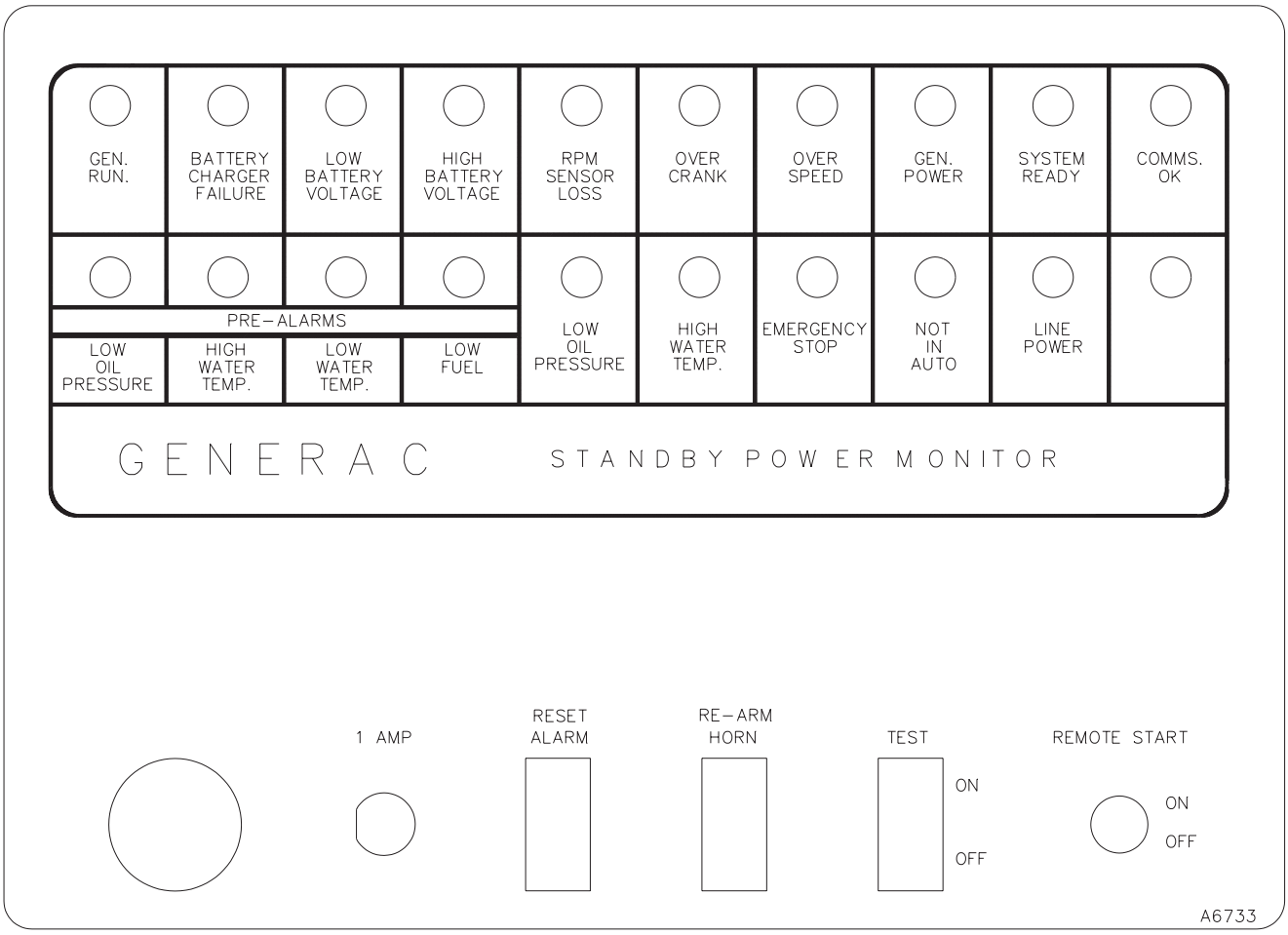
GENERAC®

POWER SYSTEMS, INC.

20 Light Remote Annunciator

Owner's Manual



Surface Mount	Flush Mount	
000984-0	000985-0	Standard Annunciator
000984-1, 000984-2	000985-1, 000985-2	
004280-0	004281-0	Annunciator w/Remote Relay Panel
004280-1, 004280-2	004281-1, 004281-2	
004391-0, 004391-1	004392-0, 004392-1	Time Multiplexed Annunciator

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DETAILED SPECIFICATIONS

◆ ENVIRONMENTAL SPECS

Temperature	-20°C to +50°C
Humidity	0 to 95% Non Condensing

◆ POWER SUPPLY REQUIREMENTS

Power Supply Source	Generator Battery to comply with NFPA
Nominal Supply	+12 to +24VDC
Transient protection	Spikes clamped to 40V
Power Usage	150mA maximum.
Battery Supply cable	2 wire - DC resistance less than 7 Ohms per conductor.
Fuse on front panel	1 Amp

◆ COMMUNICATION WITH D/E PANEL

Communication link	2 wire RS485 fully isolated.
Communication cable	2 wire—twisted pair with overall screen.
Cable size	24 AWG 0-250 feet. 18 AWG 0-1,200 feet.
Baud rate	2400/4800/9600 bd Auto detect.

NOTE:

1. **Ensure the generator control panel is set to the proper protocol.**
2. **The RS485 cable should not be run in the same conduit, or in the same grouping as any high voltage or other "noisy" electrical conductors.**
3. **Avoid running the RS485 cable through any "high noise" environments.**

◆ INTERFACE WITH OTHER EQUIPMENT

Alarm Relay Output	1 pair N/O Volt-free contacts-100mA, 24V DC

◆ AGENCY COMPLIANCE

NFPA-110	Yes
NFPA-99	Yes

◆ TRANSPORTATION AND STORAGE

Temperature	-20°C to +80°C
Humidity	0-95% Non Condensing

◆ PACKAGING AND MOUNTING

Enclosure type	Sheet metal box.
Base panel	Part #A6985/A7437
Front panel	Part #A6988/A7443
Panel overlay	Part #A6733
Field replacement	Physically replaceable with Model #9556 electrically not compatible.
Mounting	Flush or Wall.
Weight requirements	None
Manuals	Yes - Operator guide

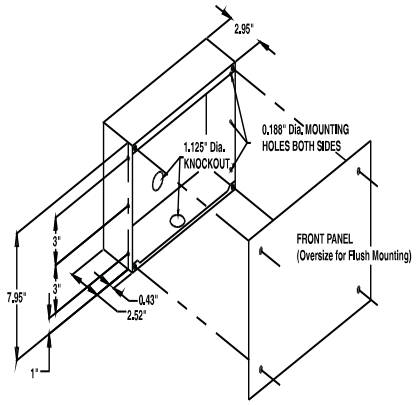
◆ ANNUNCIATOR PANEL MOUNTING

NOTE:

For ALL models installation must always comply with applicable codes, standards, laws and regulations. Adhere strictly to local, state and national electrical and building codes. Comply with regulations the Occupational Safety and Health Administration (OSHA) have established. Also, the generator and related components must be installed completely in conformance with the manufacturer's instructions and recommendations. Following proper installation, do nothing that might alter a safe installation and render the unit in non-compliance with such codes, standards, laws and regulations.

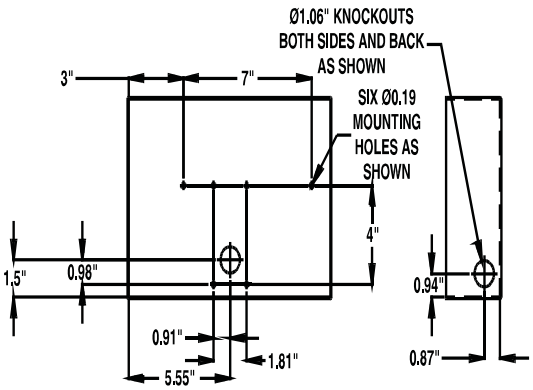
The Remote Annunciator panels (Models 000985-0, 000985-2, 004281-0, 004281-2, 004392-0, 004392-1, 000985-1, 004281-1) are intended for flush mounting. Panel mounting dimensions are shown in the illustration below. The panel can be installed behind a cutout in an existing sheet metal panel by using the four mounting holes in its front panel. For wall mounting, use a square outlet box behind the annunciator panel.

Flush Mounting Dimensions



The Remote Annunciator panels (Models 000984-0, 000984-2, 004280-0, 004280-2, 004391-0, 004391-1 000984-1, 004280-1) are mounted using any combination of the mounting holes in the back panel of the box itself.

Surface Mount Dimensions



SYSTEM SPECIFICATION

The 20 Light Remote Annunciator Panel (RAP) directly interacts with the the D/E panel generator and provides remote monitoring and annunciation of 17 generator parameters, 2 system-level warnings—System Ready and Communications OK and 1 spare channel.

It is similar to the existing Model 09556-0 Remote Annunciator unit which interfaces with the 'C' Panel display, the main difference being that it interfaces to the D/E Panels via a 2 wire RS485 serial data link rather than a direct multiway cable.

Power to the RAP is supplied from the generator battery (+12V to +24V) via a 2 wire link.

◆ PASSIVE MODE

The 20 light remote annunciator is an active device which periodically makes a request to the generator control panel for information. However, the 20 light annunciator can be set to passive mode. This mode allows the user to connect a second 20 light remote annunciator to the generator control panel.

◆ SETTING TO PASSIVE MODE

This passive mode feature is available on Models 000984-1, 000984-2, 000985-1, 000985-2, 004280-1, 004280-2, 004281-1, 004281-2. To set the 20 light annunciator to passive mode, simply connect an 18 to 22 gauge wire between header positions J3-1 and J3-2.

NOTE:

1. **It is not recommended to connect more than a total of two 20 light remote annunciator panels. (one set to active mode, one set to passive mode)**
2. **Up to four remote relay panels can be used with the two 20 light remote annunciators.**
3. **If only one 20 light remote annunciator is connected to a generator control panel, it must be left in active mode. (without the wire link between J3-1 and J3-2)**

◆ HARDWARE FUNCTIONAL DESCRIPTION

The RAP queries the D/E panel once every three seconds and receives the generator status parameters. It will update the light panel and audible annunciator as detailed below.

◆ GENERATOR STOP SIGNALS

These lights will flash when any alarm occurs and the horn will sound as follows:

Annunciator Light	Light Color	Audible Alarm
RPM Sensor Loss	Red	Yes
Overcrank	Red	Yes
Overspeed	Red	Yes
Low Oil Pressure	Red	Yes
High Water Temp	Red	Yes
Emergency Stop	Red	Yes

The 'Re-Arm Horn' switch can be used to turn off and re-arm the horn, or the alarms can be fully acknowledged using the 'Reset' switch.

The 'Reset' switch will turn off and re-arm the horn, and any flashing lights will switch to the ON state until the alarms are no longer present at the D/E panel.

NOTE:

Alarm condition MUST be reset at the generator set control panel.

◆ WARNING INDICATORS

These lights will flash when any alarm occurs and the horn will sound according to the following table :

Annunciator Light	Light Color	Audible Alarm	Latched
Pre-Low Oil Pressure	Yellow	Yes	Yes
Pre-High Water Temp	Yellow	Yes	Yes
Pre-Low Water Temp	Yellow	Yes	Yes
Pre Low Fuel	Yellow	Yes	Yes
Battery Charger AC Failure	Yellow	Yes	No
Low Battery Voltage	Yellow	Yes	No
High Battery Voltage	Yellow	No	No
Generator Run	Yellow	No	No
Generator Power	Yellow	No	No
Not in Auto	Red	Yes	No

These alarms will be latched/not latched by the RAP according to the above table. They can be acknowledged at the RAP using the 'Reset' switch—the active lamps will then stop flashing and remain in the ON state until the alarm signal disappears from the D/E Panel. The 'Reset' switch will also turn off and re-arm the horn.

NOTE:

These lamps can only be fully reset when the alarm state is no longer active and "Reset" has been pressed at both the D/E panel and the RAP.

Alternatively, at any time the horn can be turned OFF and re-armed with the 'Re-Arm Horn' switch.

◆ GENERATOR POWER

Is defined as whether transfer switch is in Generator supply position—measured from transfer switch through the generator control panel.

D-Panel Connection - connects to signal RA-5 which comes from CPU board J7 pin 9. There is no D Panel programming required.

E-Panel Connection - connects to signal A2 (PRG INPT 2) which comes from E panel master control box CON1 pin 2. Suggested settings for PRG INPT 2: Generator Power, Low, Always, Status

NOTE:

Wire 0 from the D/E Panel must be connected to the "Common" terminal on the transfer switch "Aux" contacts, for these indicators to work properly. Do NOT connect DC voltage to these circuits. This is a digital signal circuit ONLY.

◆ LINE POWER

Is defined as whether the transfer switch is in Utility supply position—measured from transfer switch through the generator control panel.

D-Panel Connection - connects to signal RA-4 which comes from CPU board J7 pin 10. There is no D panel programming required.

E-Panel Connection - connects to signal A3 (PRG INPT3) which comes from E panel master control box CON1 pin 3. Suggested settings for PRG INPT 3: Line Power, Low, Always, Status

NOTE:

Wire 0 from the D/E Panel must be connected to the "Common" terminal on the transfer switch "Aux" contacts, for these indicators to work properly. Do NOT connect DC voltage to these circuits. This is a digital signal circuit ONLY.

◆ BATTERY CHARGER AC FAILURE

This light annunciates upon loss of 120 VAC power supply to the battery charger. This requires an AC relay with normally closed contacts connected in the circuit feeding power to the battery charger. The relay contacts need to be wired to terminals on the D/E control panel.

NOTE:

To prevent false alarms caused by brief power outages or load switching, a time delay AC relay (approx. 30 second delay) is suggested.

D-Panel Connection - connects to signal RA-12 which comes from CPU board J7 pin 1. There is no D panel programming required.

E-Panel Connection - connects to signal A1 (PRG INPT1) which comes from E panel master control box CON1 pin 1. Suggested settings for PRG INPT1: Battery Charge Fail, Low, Always, Non-Latch

Annunciator Light	Light Color	Audible Alarm
System Ready	Green	No
Communication OK	Green	Yes
Line Power	Green	No
Spare	Green	No

◆ SYSTEM STATUS INDICATORS

These lamps are for Status indication only—the normal condition is ON.

◆ SYSTEM READY

For Models:

000984-0	000985-0
000984-1	000985-1
004280-0	004281-0
004280-1	004281-1
004391-0	004392-0

Status light is dependent upon the following conditions:

a. Generator must be set to "Auto" mode.

b. Battery power (+12V or +24V) must be present (for example, low battery voltage lamp is off.)

c. None of the annunciator's alarm or pre-alarm lamps are lit.

For Models:

000984-2	000985-2
004280-2	004281-2
004391-1	004392-1

Status light is dependent upon conditions a, b, and c (from above), plus the following:

d. There are no generator engine sensor faults (for example, oil pressure, coolant temperature, etc.) A fault is considered either an open or shorted sensor.

e. "D" Panel application: The spare warning 2 light is not lit.

f. "E" Panel application: There are no user programmable shutdowns active.

NOTE:

For models 000984-2, 000985-2, 004280-2, 004281-2, 004391-1, 004392-1: Conditions d, e, and f will only be considered if the generator's control panel is running the following software:

"D" Panel software version V1.11 or later.

"E" Panel software version V1.15 or later.

Otherwise the annunciator will still be fully functional, but will only follow conditions a, b, and c.

◆ COMMUNICATION OK

This light indicator is ON as long as there is proper communication between the RAP and the D/E panel. The light is turned OFF if the RAP does not receive a valid RS485 response from the D/E panel defined as either:

a. Three consecutive data requests from the RAP are ignored.

b. Three consecutive data responses contain data errors — string length or non valid characters.

When communication failure occurs, the RAP will flash the Communication OK LED, and sound the Horn. The rate of flashing will be indicative of the cause of the error.

a. No reply from D/E panel -

frequency one sec on/one sec off.

b. Consecutive data errors -

frequency .05 sec on/two sec off.

This alarm condition can be acknowledged at the RAP using the 'Reset' switch — the horn will be turned off and re-armed and the communication OK light will continue to flash until proper communication returns.

◆ SPARE

The spare LED does not perform any function in a "D" panel application, but it can be used in an "E" panel application. To make the "E" panel connection, connect to signal A4 (PRG INPT 4) which comes from the "E" Panel Master Control Box CON1 pin 4.

When signal A4 is active, the Spare LED will flash and can be reset or cleared in the same manner as the warning indicators described earlier. NOTE that the horn will not sound.

◆ AUDIBLE ANNUNCIATOR

See System Status Indicators chart for alarm occurrences.

◆ TEST SWITCH

While the test switch is pressed, all lights will light and the horn will sound. When released the lights will return to their original status. During this test, communication to D/E panel will be suspended.

◆ RE—ARM HORN SWITCH

The re-arm horn switch will silence the horn and re-arm it for new alarm occurrences.

◆ RESET SWITCH

The reset switch is used to acknowledge any active alarms. It will re-set any flashing light to ON (steady) condition. If the alarm no longer exists and it has also been latched OFF at the D/E panel (Pre-Alarm indicators only) the active light will go OFF. It will also silence the horn and re-arm it for new alarm occurrences.

NOTE:

Pre-Alarm Conditions MUST be reset at the generator set control panel.

◆ RELAY OUTPUT

The RAP will also provide a pair of Normally Open contacts which will mimic the status of the Audible alarm (Horn), The relay output is fail-safe i.e. DC supply failure will reset the relay to OFF, which will close the contacts.

SOFTWARE SPECIFICATION

In general terms, the RAP polls the D/E Panel. The D/E panel returns an ASCII text string which represents the status of the indicator lights on the panel display.

◆ SERIAL INTERFACE

Default	4800,n,8,1
Auto-detect	2400, 9600bd.

◆ REQUEST FREQUENCY

Once per three seconds.

◆ OPERATOR FUNCTIONS

Switches will be scanned every 1/10 second.

◆ ERROR HANDLING

An error will be reported by flashing the Communication OK light—the rate of flashing will be indicative of the cause of the error.

a. No reply from D/E panel—frequency one sec on / one sec off.
b. Consecutive data errors—frequency 0.5 sec on / two sec off.

◆ HARDWARE WATCHDOG

Will reset the CPU if :

a. Supply voltage at CPU drops below 4.65V.
b. CPU activity stops for 15 sec.

◆ TIME MULTIPLEXED 20 LIGHT REMOTE ANNUNCIATOR

Model Numbers:

004391	Flush mount
004392	Surface mount

(For use with the "E" option control panel only)

These versions of the 20 light remote annunciator will allow the "E" option control panel to communicate with both the 20 light remote annunciator/remote relay panel and Genlink.

System Requirements

- E panel software version V1.07 or later
- 20 light time multiplexed remote annunciator
- Genlink Version V4.xx or later
- 200 Mhz Pentium PC or equivalent (minimum)

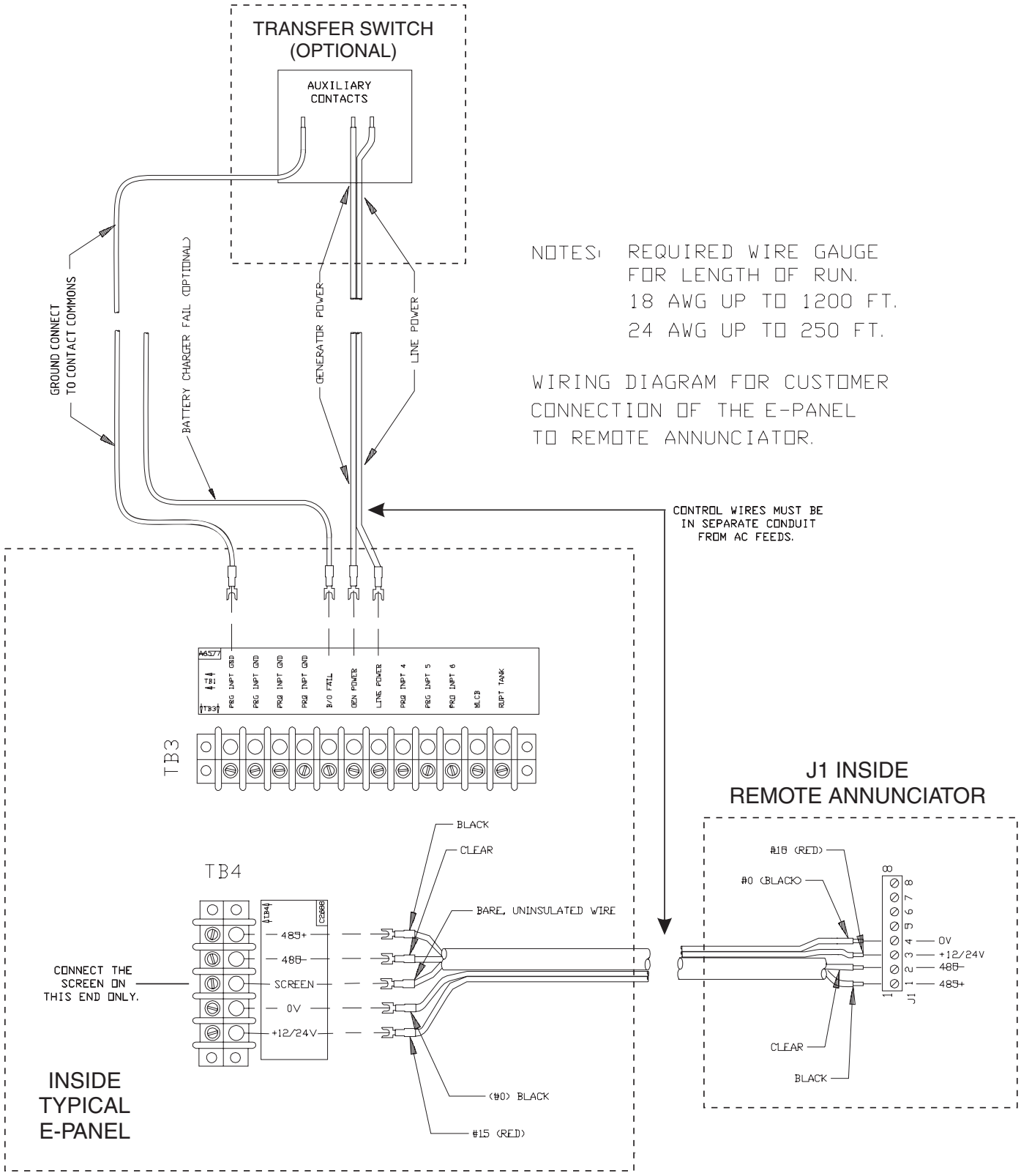
System Setup

The modem must be initialized with an appropriate "set-up string" prior to being used in this system. If a US Robotics 56K V90 modem is used, this "set-up string" can be sent by the "E" control module. To initialize the modem using the "E" control module, follow the step-by-step instructions titled "E PANEL MODEM SETUP PROCEDURE" found in the "E" panel owner's manual (p/n 0A7605). NOTE: When performing this modem initialization, a standard 25 to 9 pin modem cable is required. This cable is no longer needed once the modem has been initialized. Once this procedure has been completed, return to this section and continue with the system set-up procedure outlined below.

- Set the E panel for RS485 communications
- Set the modem dip switches as shown in the wiring diagram **0C5770-A**
- Power cycle the modem (after setting the dip switches)

NOTE:

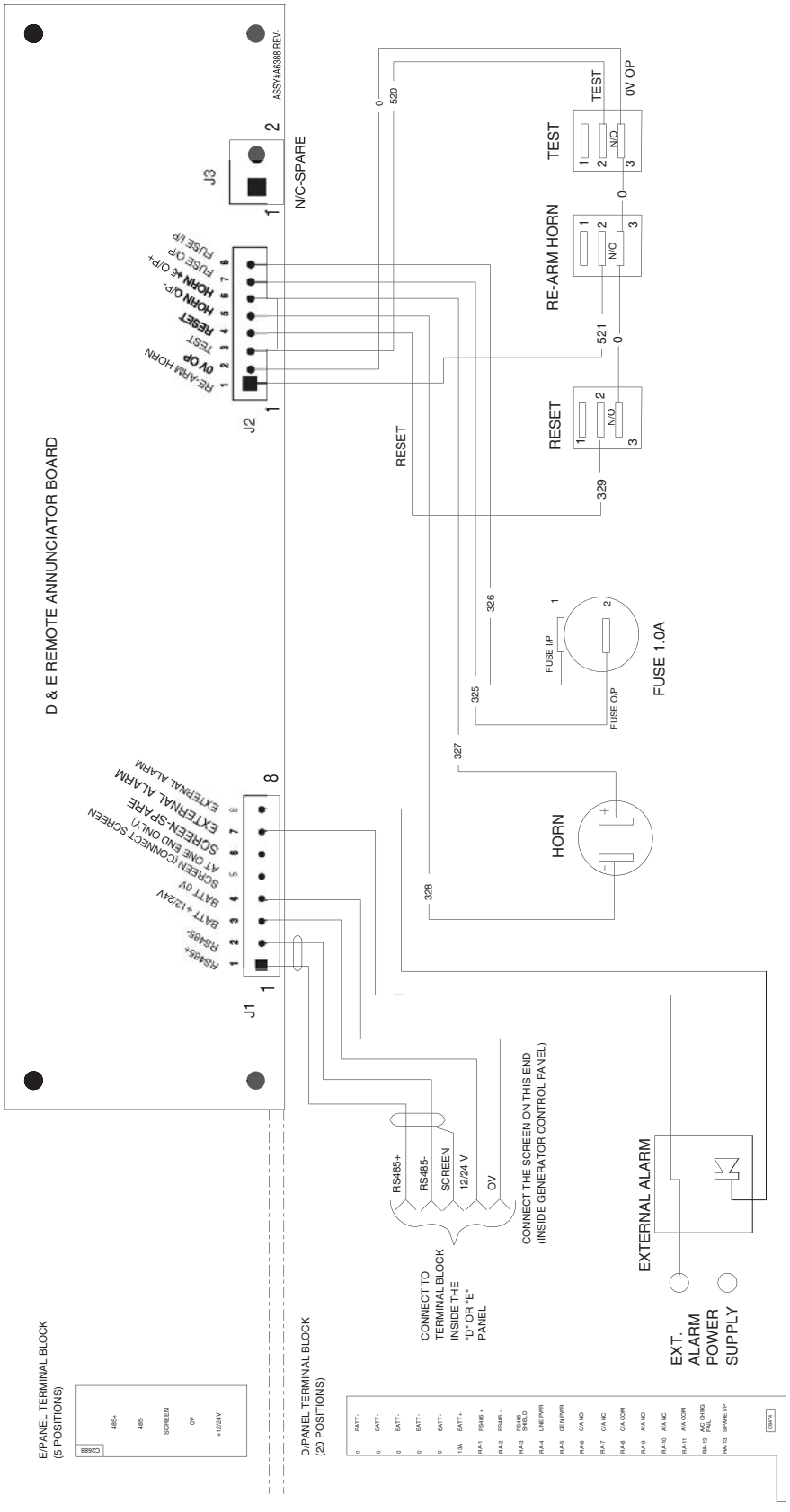
1. **The time multiplexed 20 light remote annunciator does not support passive mode operation. This means that only one 20 light remote annunciator can be used.**
2. **Up to four remote relay panels may be added to this system. The remote relay panels must have software version A9041 rev C or later.**


TRANSFER SWITCH
(OPTIONAL)
AUXILIARY
CONTACTS
GROUND CONNECT
TO CONTACT COMMONS
BATTERY CHARGER FAIL (OPTIONAL)
GENERATOR POWER
LINE POWER
NOTES: REQUIRED WIRE GAUGE
FOR LENGTH OF RUN.
18 AWG UP TO 1200 FT.
24 AWG UP TO 250 FT.
WIRING DIAGRAM FOR CUSTOMER
CONNECTION OF THE E-PANEL
TO REMOTE ANNUNCIATOR.
CONTROL WIRES MUST BE
IN SEPARATE CONDUIT
FROM AC FEEDS.
TB3
PRG INPT GND
PRG INPT GND
PRG INPT GND
PRG INPT GND
B/O FAIL
GEN POWER
LINE POWER
PRG INPT 4
PRG INPT 5
PRG INPT 6
MLCB
RUPT TANK
TB4
BLACK
CLEAR
BARE, UNINSULATED WIRE
485+
485-
SCREEN
0V
+12/24V
CONNECT THE
SCREEN ON
THIS END ONLY.
(#0) BLACK
#15 (RED)
INSIDE
TYPICAL
E-PANEL
J1 INSIDE
REMOTE ANNUNCIATOR
#16 (RED)
#0 (BLACK)
0V
+12/24V
485-
485+
CLEAR
BLACK
J1

20 Light Remote Annunciator

Electrical Schematic – Drawing No. 0A7169-B

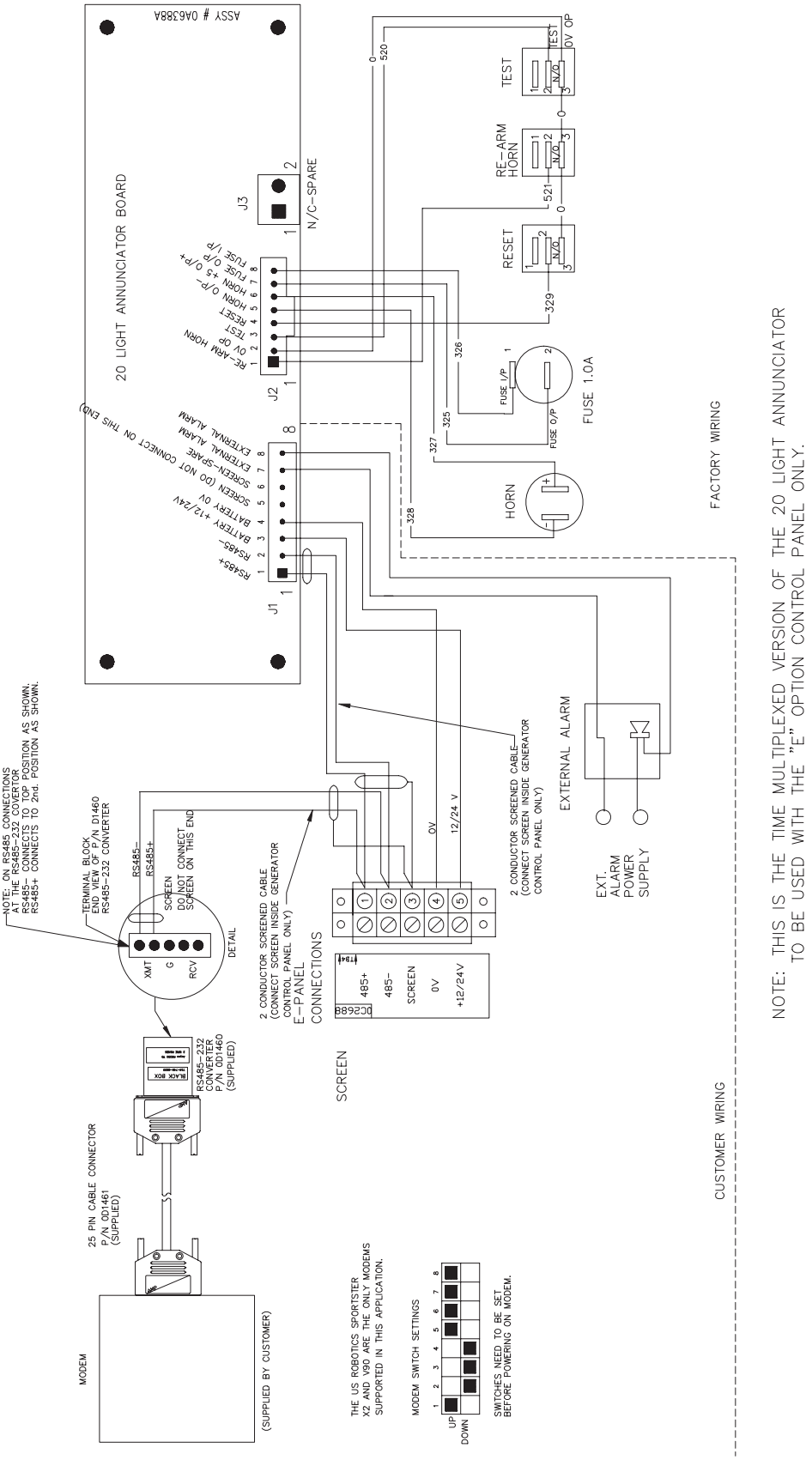
For Models: 000984-0, 000984-1, 000984-2 000985-0, 000985-1, 000985-2, 004280-0, 004280-1, 004280-2, 004281-0, 004281-1, 004281-2



ELECTRICAL DATA

Electrical Schematic – Drawing No. 0C5770-B

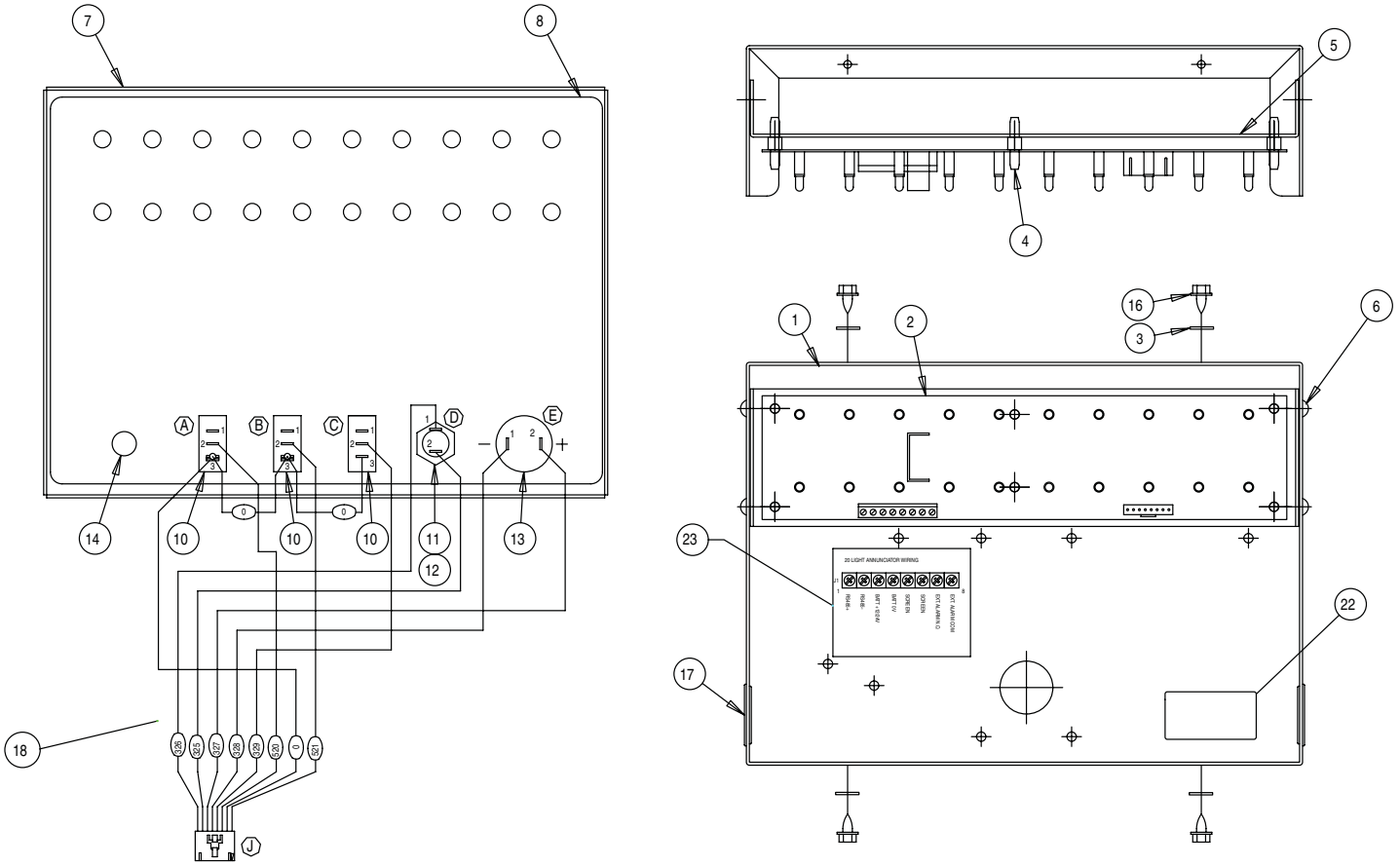
For Models: 004391-0, 004391-1, 004392-0, 004392-1



PARTS LISTS

20 Light Remote Annunciator

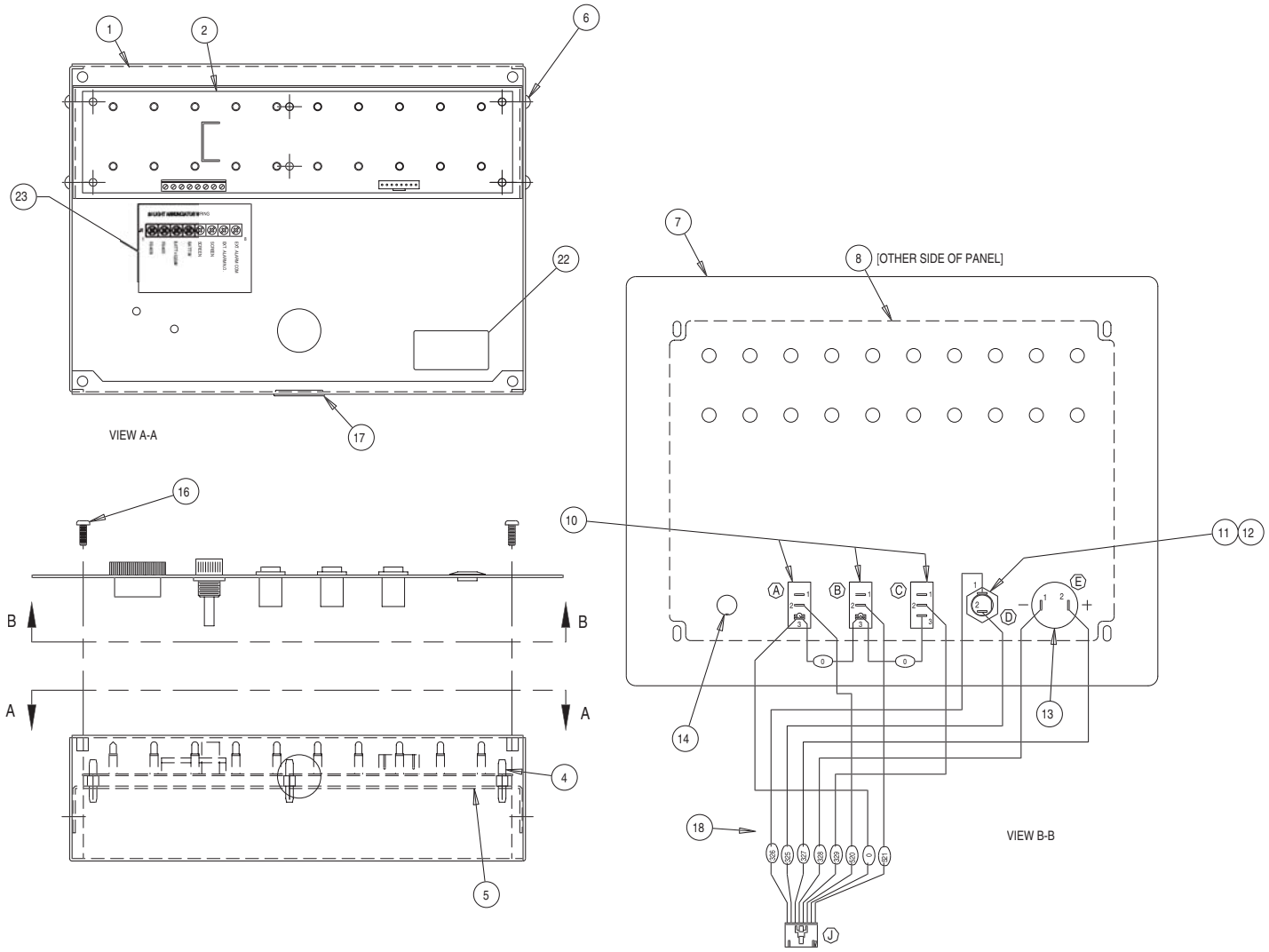
Surface Mount Assembly — Drawing No. 0A6991-L
Models 000984-0, 000984-1, 000984-2



ITEM	PART NO.	QTY.	DESCRIPTION
1	0A6985	1	PANEL ANNUNCIATOR REAR
2	0A6388	1	ASSY PCB 20LT ANN D/E PNL
3	052621	4	WASHER NYLON .200
4	040213	6	PCB SUPPORT SNAP-IN 1/4”
5	0A6990	1	SUPPORT, PC BOARD
6	036261	4	RIVET POP .125 X .275 AL
7	0A6988	1	PANEL ANNUNCIATOR FRONT
8	0A6733	1	DECAL 20LT ANNUN PANEL GENERAC
10	061284	3	SWITCH ROCKER SPST 10@125V SPD
11	032300	1	HOLDER FUSE
12	044299	1	FUSE 1A X AGC1
13	061286	1	SOUNALERT, BUZZER
14	065511	1	PLUG PANEL PLASTIC 1/2”
16	056892	4	SCREW CRIMPTITE 10-24 X 3/8
17	025034	2	PLUG STEEL 1.0625
18	0E5620	1	HARNESS, 10 WIRE REMOTE ANN
22	0D8477	1	DECAL, MODEL # SOFTWARE REQUIR
23	0D4462	1	DECAL, WIRING, REMOTE ANNUNCIATOR

PARTS LISTS

Flush Mount Assembly — Drawing No. 0A7440-J
Models 000985-0, 000985-1, 000985-2



ITEM	PART NO.	QTY.	DESCRIPTION
1	0A7437	1	PANEL ANNUNCIATOR REAR
2	0A6388	1	ASSY PCB 20LT ANN D/E PNL
4	040213	6	PCB SUPPORT SNAP-IN 1/4"
5	0A6990	1	SUPPORT, PC BOARD
6	036261	4	RIVET POP .125 X .275 AL
7	0A7438	1	PANEL ANNUNCIATOR FRONT
8	0A6733	1	DECAL 20LT ANNUN PANEL GENERAC
10	061284	3	SWITCH ROCKER SPST 10@125V SPD
11	032300	1	HOLDER FUSE
12	044299	1	FUSE 1A X AGC1
13	061286	1	SOUNALERT, BUZZER
14	077704	1	PLUG PANEL PLASTIC 1/2"
16	036918	4	SCREW PPHM #8-32 X 1/2
17	025034	2	PLUG STEEL 1.0625
18	0E5620	1	HARNESS, 10 WIRE REMOTE ANN
22	0D8477	1	DECAL, MODEL # SOFTWARE REQUIR
23	0D4462	1	DECAL, WIRING, REMOTE ANNUNCIATOR

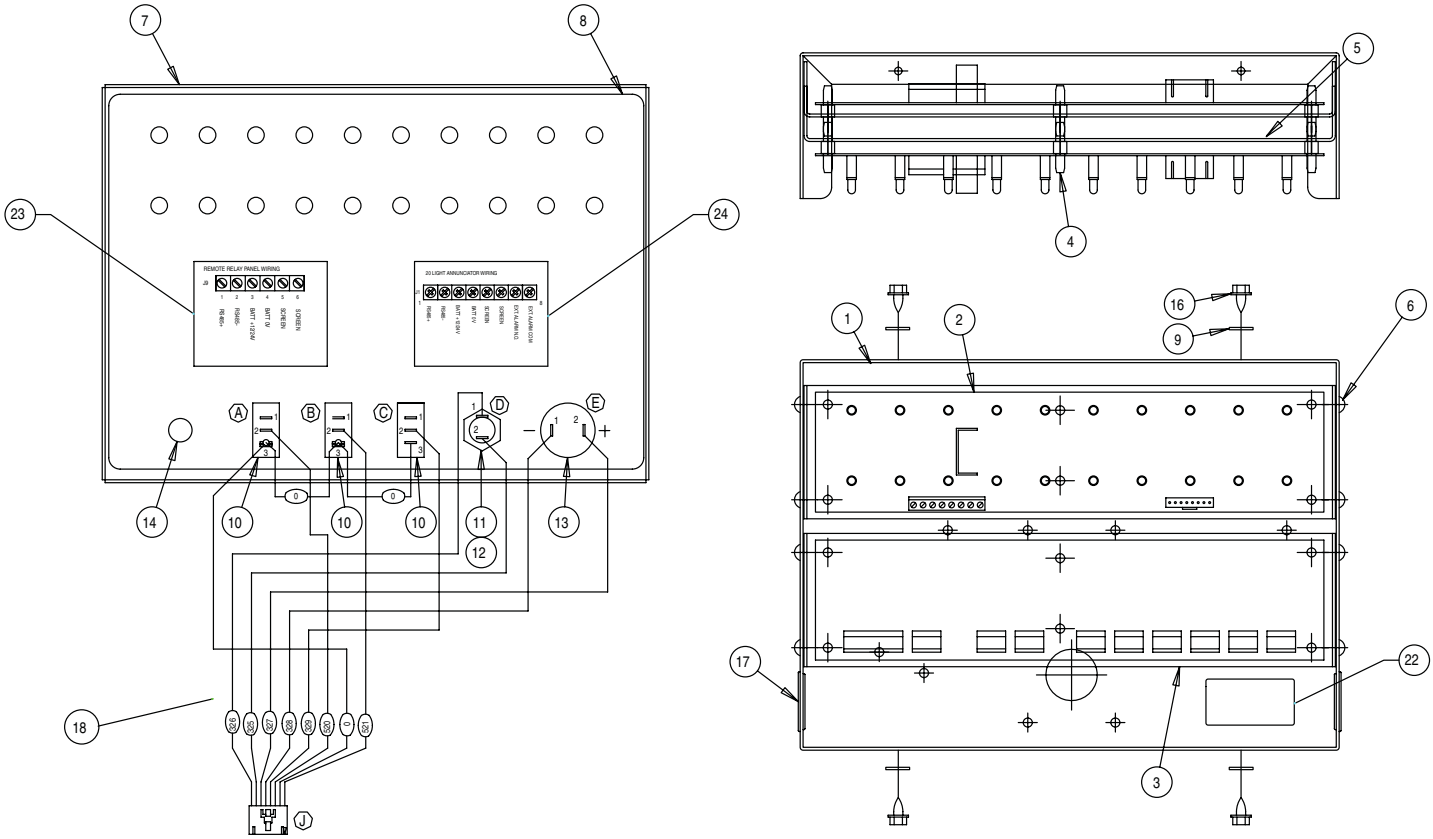
PARTS LISTS

20 Light Remote Annunciator

Surface Mount Assembly — Drawing No. 0C4937-G
Models 004280-0, 004280-1, 004280-2
20 Light Remote Annunciator with Remote Relay Panel

NOTE:

Model 004280-0 DOES NOT work in a "D" panel application.
Model 004280-1 & 004280-2 DOES work in a "D" panel application.



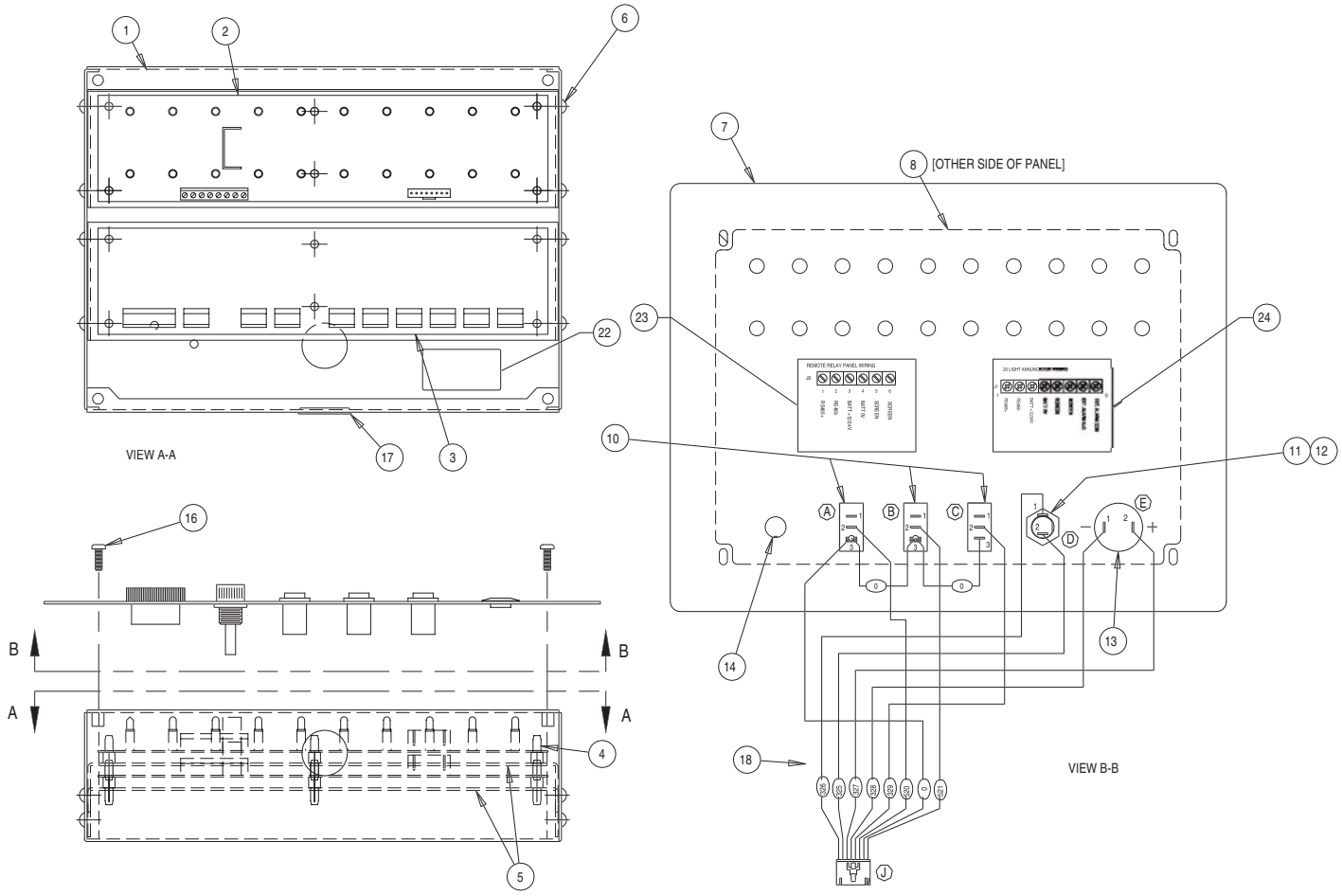
ITEM	PART NO.	QTY.	DESCRIPTION
1	0A6985	1	PANEL ANNUNCIATOR REAR
2	0A6388	1	ASSY PCB 20LT ANN D/E PNL
3	0A9036	1	ASSY PCB 8-CH REM RLY RRP STD
4	040213	12	PCB SUPPORT SNAP-IN 1/4"
5	0A6990	2	SUPPORT, PC BOARD
6	036261	8	RIVET POP .125 X .275 AL
7	0A6988	1	PANEL ANNUNCIATOR FRONT
8	0A6733	1	DECAL 20LT ANNUN PANEL GENERAC
9	052621	4	WASHER NYLON .200
10	061284	3	SWITCH ROCKER SPST 10@125V SPD
11	032300	1	HOLDER FUSE
12	044299	1	FUSE 1A X AGC1
13	061286	1	SOUNALERT, BUZZER
14	065511	1	PLUG PANEL PLASTIC 1/2"
16	056892	4	SCREW CRIMPTITE 10-24 X 3/8
17	025034	2	PLUG STEEL 1.0625
18	0E5620	1	HARNESS, 10 WIRE REMOTE ANN
22	0D8479	1	DECAL, MODEL # SOFTWARE REQUIR
23	0D4461	1	DECAL, MODEL # SOFTWARE REQUIR
24	0D4462	1	DECAL, WIRING, REMOTE ANNUNCIATOR

PARTS LISTS

Flush Mount Assembly — Drawing No. 0C4938-F
Models 004281-0, 004281-1, 004281-2
20 Light Remote Annunciator with Remote Relay Panel

NOTE:

Model 004281-0 DOES NOT work in a "D" panel application.
Model 004281-1 & 004281-2 DOES work in a "D" panel application.



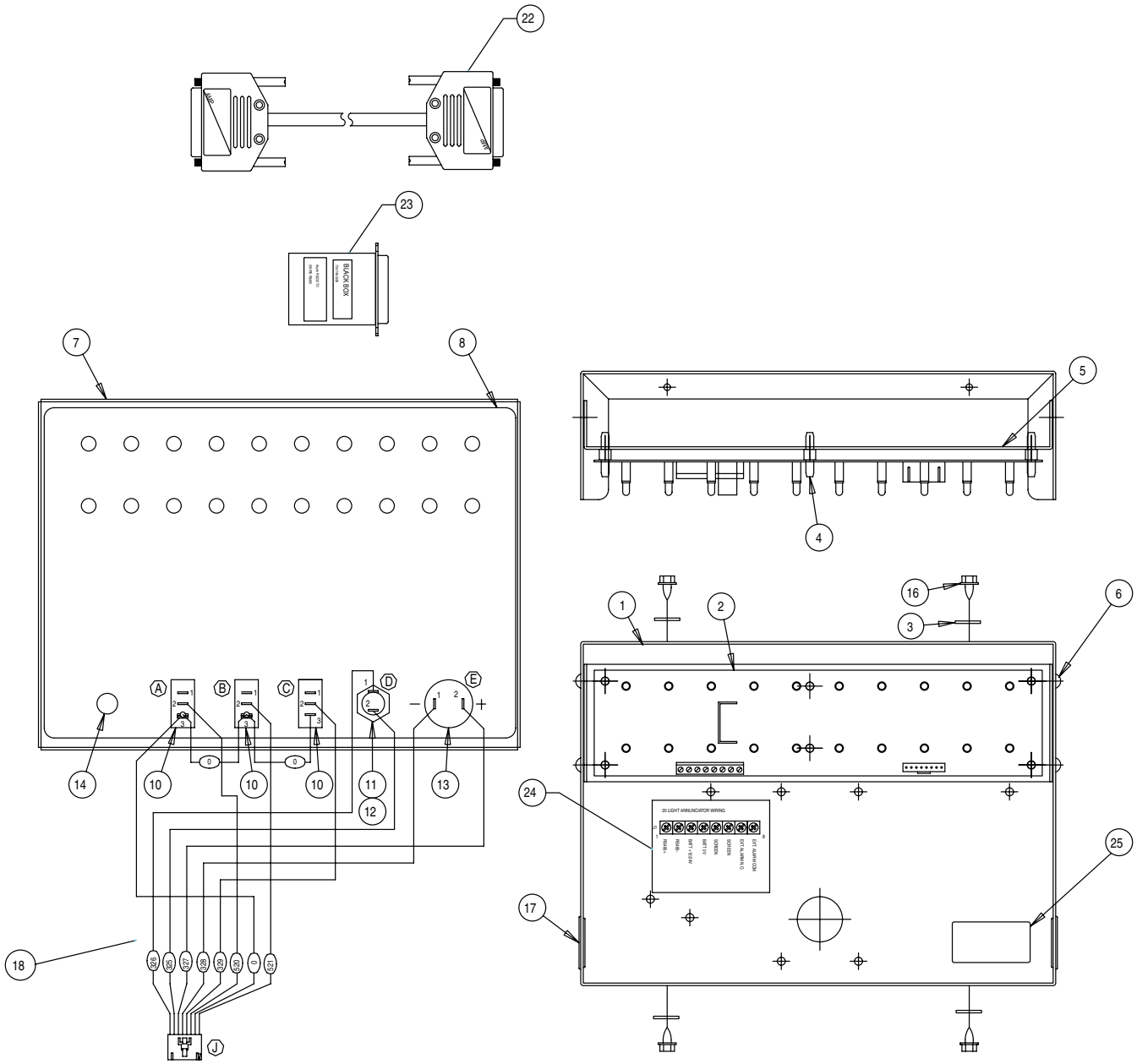
ITEM	PART NO.	QTY.	DESCRIPTION
1	0A7437	1	PANEL ANNUNCIATOR REAR
2	0A6388	1	ASSY PCB 20LT ANN D/E PNL
3	0A9036	1	ASSY 8-CHAN REM RLY STAND RRP
4	040213	12	PCB SUPPORT SNAP-IN 1/4"
5	0A6990	2	SUPPORT, PC BOARD
6	036261	8	RIVET POP .125 X .275 AL
7	0A7438	1	PANEL ANNUNCIATOR FRONT
8	0A6733	1	DECAL 20LT ANNUN PANEL GENERAC
10	061284	3	SWITCH ROCKER SPST 10@125V SPD
11	032300	1	HOLDER FUSE
12	044299	1	FUSE 1A X AGC1
13	061286	1	SOUNALERT, BUZZER
14	065511	1	PLUG PANEL PLASTIC 1/2"
16	036918	4	SCREW PPHM #8-32 X 1/2
17	025034	1	PLUG STEEL 1.0625
18	0E5620	1	HARNESS, 10 WIRE REMOTE ANN
22	0D8480	1	DECAL, MODEL # SOFTWARE REQUIR
23	0D4461	1	DECAL, WIRING, REMOTE RELAY PNL
24	0D4462	1	DECAL, WIRING, REMOTE ANNUNCIATOR

20 Light Remote Annunciator

Surface Mount Assembly — Drawing No. 0D1627-E
Model 004391-0 & 004391-1

NOTE:

This is the Time Multiplexed version to be used with the "E" Panel only.



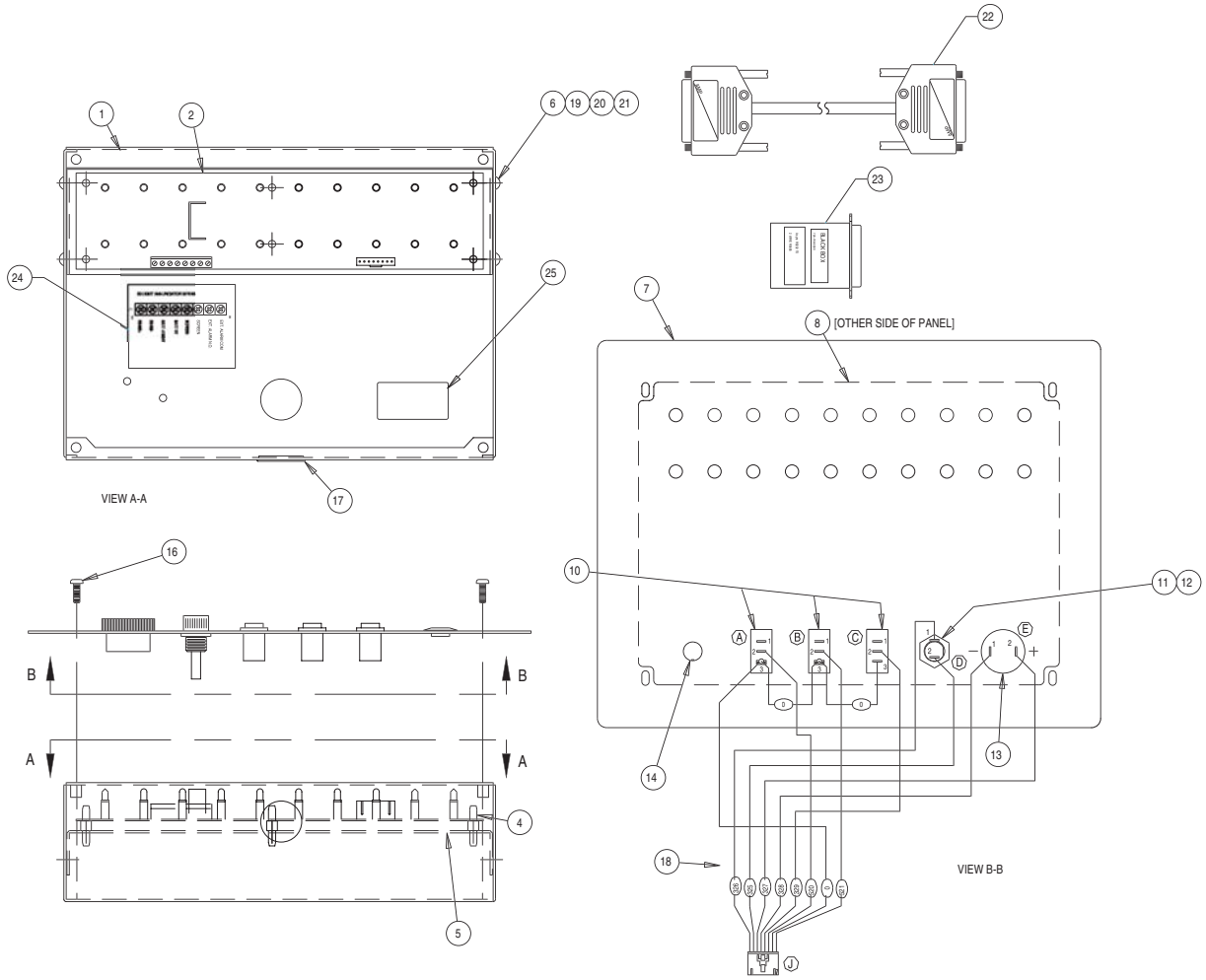
ITEM	PART NO.	QTY.	DESCRIPTION
1	0A6985	1	PANEL ANNUNCIATOR REAR
2	0A6388A	1	ASSY PCB RS485 DUAL COMM E-PNL
3	052621	4	WASHER NYLON .200
4	040213	6	PCB SUPPORT SNAP-IN 1/4"
5	0A6990	1	SUPPORT, PC BOARD
6	036261	4	RIVET POP .125 X .275 AL
7	0A6988	1	PANEL ANUNCIATR FRONT
8	0A6733	1	DECAL 20LT ANNUN PANEL GENERAC
10	061284	3	SWITCH ROCKER SPST 10@125V SPD
11	032300	1	HOLDER FUSE
12	044299	1	FUSE 1A X AGC1
13	061286	1	SOUNALERT, BUZZER
14	077704	1	PLUG PLASTIC 0.5 FLUSH
16	056892	4	SCREW CRIMPTITE 10-24 X 3/8
17	025034	2	PLUG STEEL 1.0625
18	0E5620	1	HARNESS,10 WIRE REMOTE ANN
22	0D1461	1	CABLE, ASSY 20 LIGHT
23	0D1460	1	CONVRTR RS232 TO 485
24	0D4462	1	DECAL,WIRING,REMOTE ANNUNCIATOR
25	0D8481	1	DECAL, MODEL # SOFTWARE REQUIR

PARTS LISTS

Flush Mount Assembly — Drawing No. 0D1628-D
Model 004392-0 & 004392-1

NOTE:

This is the Time Multiplexed version to be used with the "E" Panel only.



ITEM	PART NO.	QTY.	DESCRIPTION
1	0A7437	1	PANEL ANNUNCIATOR REAR
2	0A6388A	1	ASSY PCB RS485 DUAL COMM E-PNL
4	040213	6	PCB SUPPORT SNAP-IN 1/4"
5	0A6990	1	SUPPORT, PC BOARD
6	036261	4	RIVET POP .125 X .275 AL
7	0A7438	1	PANEL ANUNCIATR FRONT
8	0A6733	1	DECAL 20LT ANNUN PANEL GENERAC
9	074094	2	LUG DIS TAB
10	061284	3	SWITCH ROCKER SPST 10@125V SPD
11	032300	1	HOLDER FUSE
12	044299	1	FUSE 1A X AGC1
13	061286	1	SOUNALERT, BUZZER
14	077704	1	PLUG PLASTIC 0.5 FLUSH
16	036918	4	SCREW PPHM #8-32 X 1/2
17	025034	2	PLUG STEEL 1.0625
18	0E5620	1	HARNESS,10 WIRE REMOTE ANN
22	0D1461	1	CABLE, ASSY 20 LIGHT
23	0D1460	1	CONVRTR, RS232 TO 485
24	0D4462	1	DECAL,WIRING,REMOTE ANNUNCIATOR
25	0D8482	1	DECAL, MODEL # SOFTWARE REQUIR

TROUBLESHOOTING GUIDE

No LEDs are lit.	1. Check for proper battery supply at J1 pins 3 and 4. • J1 pin 3 should be + Battery (12 or 24 volts). • J1 pin 4 should be – Battery. • Refer to the "power supply requirements" section at the beginning of the manual for cable specifications. 2. Check the 1 Amp panel fuse, replace if necessary.
The "Communication OK" LED is flashing at the rate: one sec on/one sec off	1. Does the RS485 communications cable meet specifications. Refer to the "Communication with D/E panel" section at the beginning of the manual. 2. Check that the RS485 connections are connected properly. • RS485+ connected to J1 pin 1. • RS485– connected to J1 pin 2. • Shield is connected correctly. Refer to the wiring schematic- for your particular model located in this manual. **Note the screen should be connected on one end only.** 3. Check that the generator control panel protocol is set correctly. Refer to the generator's control panel manual for instructions. 4. "E" Panel application: Check the communications switch on the back of the "E" panel master control box. This switch needs to be set for RS485 communications. The "E" Panel must be "power cycled" after the switch is set. This can be done by removing/replacing the front panel fuse. 5. Check for proper installation of the RS485 cable between the annunciator and the generator's control panel. Is this cable sharing a conduit or running next to any high voltage or other "noisy" electrical lines?
The "Communication OK" LED is flashing at the rate: 0.5 sec on/two sec off	1. Does the RS485 communications cable meet specifications? Refer to the "Communication with D/E Panel" section at the beginning of the manual. 2. Is the cable shield connected correctly? Refer to the wiring schematic for your particular model located in this manual. **Note that the screen should be connected on one end only.** 3. Check for proper installation of the RS485 cable between the annunciator and the generator's control panel. Is this cable sharing a conduit or running next to any high voltage or other "noisy" electrical lines?

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Part No. 0A7450 **Revision D (11/17/05)** **Printed in U.S.A.**