MAINTENANCE MANUAL
CONTROL PANEL
19D902522P1, P2 & P3

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SPECIFICATIONS

The following tables summarize the specifications of the Control Panel.

- **Table 1** outlines the general specifications.
- **Table 2** outlines P1 connector definitions.
- **Table 3** outlines P2 connector definitions.
- **Table 4** outlines P3 connector definitions.
- **Table 5** outlines P4 connector definitions.
- **Table 6** outlines P5 connector definitions.

Table 1 - General Specifications

TEMPERATURE	-30°C - +60°C
HEIGHT	3.5 Inches
WIDTH	19 Inches
WEIGHT	10 Ounces

ERICSSON

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Printed in U.S.A.

Table 2 - P1 Connector Definitions

Pin Number	Signal	Input/Output
P1-20	S1-UP	O
P1-18	S1-COM	I
P1-16	S1-DN	O
P1-14	S2-UP	O
P1-12	S2-COM	I
P1-10	S2-DN	O
P1-8	S3-UP	O
P1-6	S3-COM	I
P1-4	S3-DN	O
P1-7	S4-UP	O
P1-5	S4-COM	I
P1-3	S4-DN	O
P1-13	S5-UP	O
P1-11	S5-COM	I
P1-9	S5-DN	O
P1-38	S6-UP	O
P1-36	S6-COM	I
P1-34	S6-DN	O
P1-32	S7-UP	O
P1-30	S7-COM	I
P1-28	S7-DN	O
P1-26	S8-UP	O
P1-24	S8-COM	I
P1-22	S8-DN	O
P1-25	S9-UP	O
P1-23	S9-COM	I
P1-21	S9-DN	O
P1-31	S10-UP	O
P1-29	S10-COM	I
P1-27	S10-DN	O
P1-49	S11-UP	O
P1-47	S11-COM	I
P1-45	S11-DN	O
P1-50	S12-UP	O
P1-48	S12-COM	I
P1-46	S12-DN	O
P1-44	S13-UP	O
P1-42	S13-COM	I
P1-40	S13-DN	O
P1-37	S14-UP	O
P1-35	S14-COM	I
P1-33	S14-DN	O
P1-43	S15-UP	O
P1-41	S15-COM	I
P1-39	S15-DN	O

Table 3 - P2 Connector Definitions

Pin Number	Signal	Input/Output
P2-20	S16-UP	O
P2-18	S16-COM	I
P2-16	S16-DN	O
P2-14	S17-UP	O
P2-12	S17-COM	I
P2-10	S17-DN	O
P2-8	S18-UP	O
F2-6	S18-COM	I
P2-4	S18-DN	O
P2-7	S19-UP	O
P2-5	S19-COM	I
P2-3	S19-DN	O
P2-13	S20-UP	O
P2-11	S20-COM	I
P2-9	S20-DN	O
P2-38	S21-UP	O
P2-36	S21-COM	I
P2-34	S21-DN	O
P2-32	S22-UP	O
P2-30	S22-COM	I
P2-28	S22-DN	O
P2-26	S23-UP	O
P2-24	S23-COM	I
P2-22	S23-DN	O
P2-25	S24-UP	O
F2-23	S24-COM	I
P2-21	S24-DN	O
P2-31	S25-UP	O
P2-29	S25-COM	I
P2-27	S25-DN	O
P2-49	S26-UP	O
P2-47	S26-COM	I
P2-45	S26-DN	O
P2-50	S27-UP	O
P2-48	S27-COM	I
P2-46	S27-DN	O
P2-44	S28-UP	O
P2-42	S28-COM	I
P2-40	S28-DN	O
P2-37	S29-UP	O
P2-35	S29-COM	I
P2-33	S29-DN	O
P2-43	S30-UP	O
P2-41	S30-COM	I
P2-39	S30-DN	O

Table 4 - P3 Connector Definitions

Pin Number	Signal	Input/Output
P3-20	S31-UP	O
P3-18	S31-COM	I
P3-16	S31-DN	O
P3-14	S32-UP	O
F3-12	S32-COM	I
P3-10	S32-DN	O
P3-8	S33-UP	O
P3-6	S33-COM	I
P3-4	S33-DN	O
P3-7	S34-UP	O
P3-5	S34-COM	I
P3-3	S34-DN	O
P3-13	S35-UP	O
P3-11	S35-COM	I
P3-9	S35-DN	O
P3-38	S36-UP	O
P3-36	S36-COM	I
P3-34	S36-DN	O
P3-32	S37-UP	O
P3-30	S37-COM	I
P3-28	S37-DN	O
P3-26	S38-UP	O
P3-24	S38-COM	I
P3-22	S38-DN	O
P3-25	S39-UP	O
P3-23	S39-COM	I
P3-21	S39-DN	O
P3-31	S40-UP	O
P3-29	S40-COM	I
P3-27	S40-DN	O
P3-49	S41-UP	O
P3-47	S41-COM	I
P3-45	S41-DN	O
P3-50	S42-UP	O
P3-48	S42-COM	I
P3-46	S42-DN	O
P3-44	S43-UP	O
P3-42	S43-COM	I
P3-40	S43-DN	O
P3-37	S44-UP	O
P3-35	S44-COM	I
P3-33	S44-DN	O
P3-43	S45-UP	O
P3-41	S45-COM	I
P3-39	S45-DN	O

NOTE

Repairs to this equipment should be made only by an authorized service technician or facility designated by the supplier. Any repairs, alterations or substitution of recommended parts made by the user to this equipment not approved by the manufacturer could void the user's authority to operate the equipment in addition to the manufacturer's warranty.

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Table 5 - P4 Connector Definitions

Pin Number	Signal	Input/Output
P4-20	S46-UP	O
P4-18	S46-COM	I
P4-16	S46-DN	O
P4-14	S47-UP	O
P4-12	S47-COM	I
P4-10	S47-DN	O
P4-8	S48-UP	O
P4-6	S48-COM	I
P4-4	S48-DN	O
P4-7	S49-UP	O
P4-5	S49-COM	I
P4-3	S49-DN	O
P4-13	S50-UP	O
P4-11	S50-COM	I
P4-9	S50-DN	O
P4-38	S51-UP	O
P4-36	S51-COM	I
P4-34	S51-DN	O
P4-32	S52-UP	O
P4-30	S52-COM	I
P4-28	S52-DN	O
P4-26	S53-UP	O
P4-24	S53-COM	I
P4-22	S53-DN	O
P4-25	S54-UP	O
P4-23	S54-COM	I
P4-21	S54-DN	O
P4-31	S55-UP	O
P4-29	S55-COM	I
P4-27	S55-DN	O
P4-49	S56-UP	O
P4-47	S56-COM	I
P4-45	S56-DN	O
P4-50	S57-UP	O
P4-48	S57-COM	I
P4-46	S57-DN	O
P4-44	S58-UP	O
F4-42	S58-COM	I
P4-40	S58-DN	O
P4-37	S59-UP	O
P4-35	S59-COM	I
P4-33	S59-DN	O
P4-43	S60-UP	O
P4-41	S60-COM	I
P4-39	S60-DN	O

Table 6 - P5 Connector Definitions

Pin Number	Signal	Input/Output
P5-20	S61-UP	O
P5-18	S61-COM	I
P5-16	S61-DN	O
P5-14	S62-UP	O
P5-12	S62-COM	I
P5-10	S62-DN	O
P5-8	S63-UP	O
P5-6	S63-COM	I
P5-4	S63-DN	O
P5-7	S64-UP	O
P5-5	S64-COM	I
P5-3	S64-DN	O
P5-13	S65-UP	O
P5-11	S65-COM	I
P5-9	S65-DN	O
P5-38	S66-UP	O
P5-36	S66-COM	I
P5-34	S66-DN	O
P5-32	S67-UP	O
P5-30	S67-COM	I
P5-28	S67-DN	O
P5-26	S68-UP	O
P5-24	S68-COM	I
P5-22	S68-DN	O
P5-25	S69-UP	O
P5-23	S69-COM	I
P5-21	S69-DN	O
P5-31	S70-UP	O
P5-29	S70-COM	I
P5-27	S70-DN	O
P5-49	S71-UP	O
P5-47	S71-COM	I
P5-45	S71-DN	O
P5-50	S72-UP	O
P5-48	S72-COM	I
P5-46	S72-DN	O
P5-44	S73-UP	O
P5-42	S73-COM	I
P5-40	S73-DN	O
P5-37	S74-UP	O
P5-35	S74-COM	I
P5-33	S74-DN	O
P5-43	S75-UP	O
P5-41	S75-COM	I
P5-39	S75-DN	O

DESCRIPTION

Control Panel 19D902522P1 consist of seventy five (75) three position switches and is used in conjunction with Simulcast Control Crossconnect Panel 19D902550G1 *(refer to Maintenance Manual LBI-38491)*. Control Panels 19D902522P2 & P3 consist of seventy two (72) three position switches and are used in conjunction with ***GPS*** Simulcast Control Crossconnect Panel ROA 117 2255 *(refer to Maintenance Manual AE/LZB 119 2908/1)*. Each control panel controls **P**ush-**T**o-**T**alk **(PTT)** or **A**nalog/**D**igital **(A/D)** for three sites with 25 channels each *(24 channels for GPS Simulcast)*. Refer to Figures 1, 2 & 3 for typical switch configurations.

Control Panels at the GPS Simulcast Control Point in the Transmit Control/Test Rack are used for alignment purposes only *(refer to Alignment Procedures Maintenance Manual LBI-39210)*.

PTT CONTROL PANEL*(19D902522P1& P2)*

The PTT Control Panel is used to control Push-To-Talk leads going to the transmit sites. A ground connects through a set of relay contacts at the CPTC. When the switch is in the **SYSTEM/SYS** position and the relay is activated the ground connects through the relay contacts and through an **"M"** lead at the MUX to key corresponding Transmit Site/channels *(Figure 4)*.

When the switch is in the **OFF** ***(D)*** position the transmit site/channels can not be keyed.

When the switch is in the **ON** ***(A)*** position the relay contacts are bypassed and the site/channel are forced to key.

A/D CONTROL PANEL *(19D902522P3)*

In the GPS Simulcast system, **A/D** is a station GETC mode. This mode is controlled by a relay contact closure at the CPTC *(Figure 4)*. Placing the switch is in the **SYS** position allows analog *(voice)* or data transmission to occur. A ground connects through the set of relay contacts at the CPTC to an **"M"** lead input going to the MUX. This lead is grounded only when the CPTC relay is activated.

On the transmit side, the **"M"** lead connects to a corresponding **"E"** lead. When the **"M"** lead is grounded the **"E"** lead goes active. This **"E"** lead connects to the Station GETC. When the **"E"** lead goes active the Station GETC switches from a Digital to an Analog mode.

When the switch is in the **D** position, only data transmission occurs.

When the switch is in the **A** position the **"M"** lead is forced to ground by the switch and allows only analog transmission to occur.

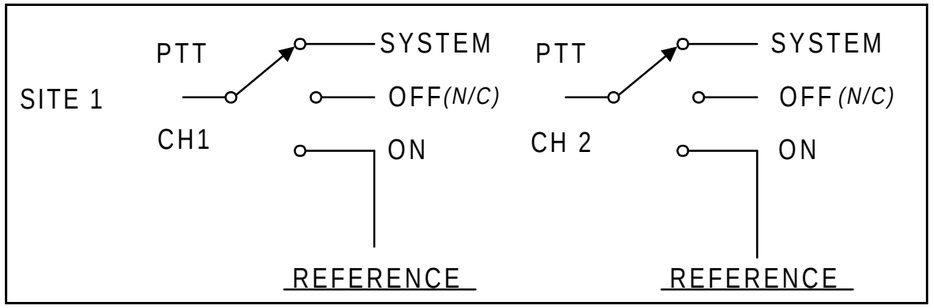


Figure 1 - Typical PTT Switch Configuration (P1)

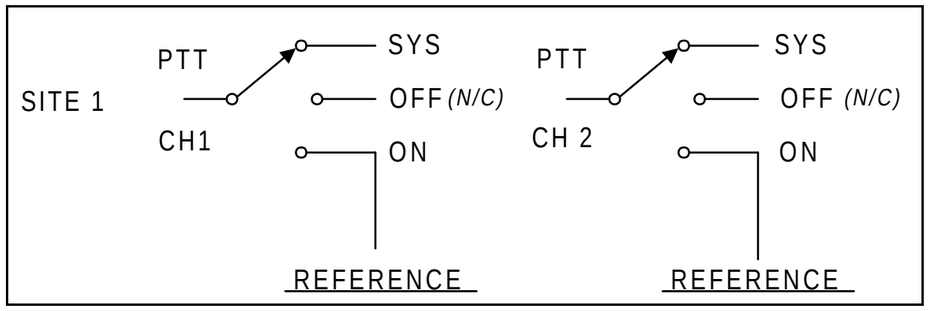


Figure 2 - Typical PTT Switch Configuration (P2)

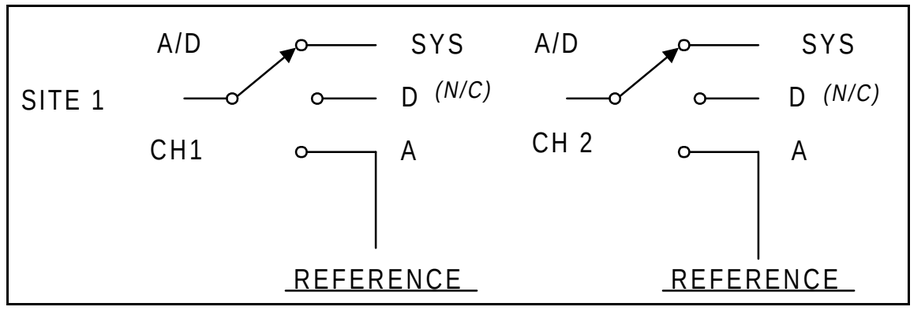


Figure 3 - Typical A/D Switch Configuration (P1)

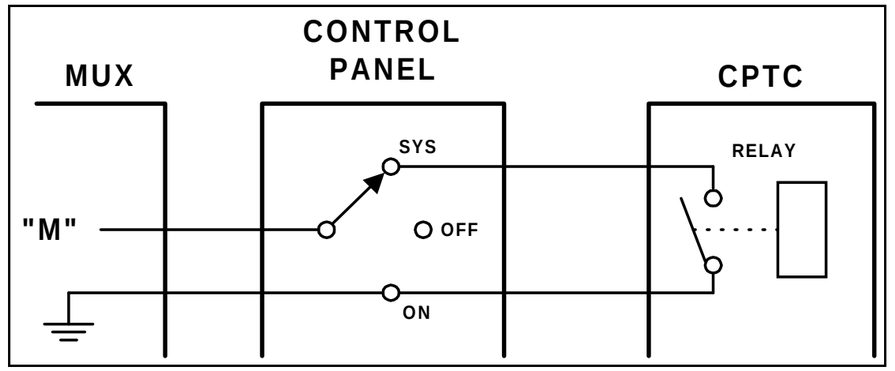
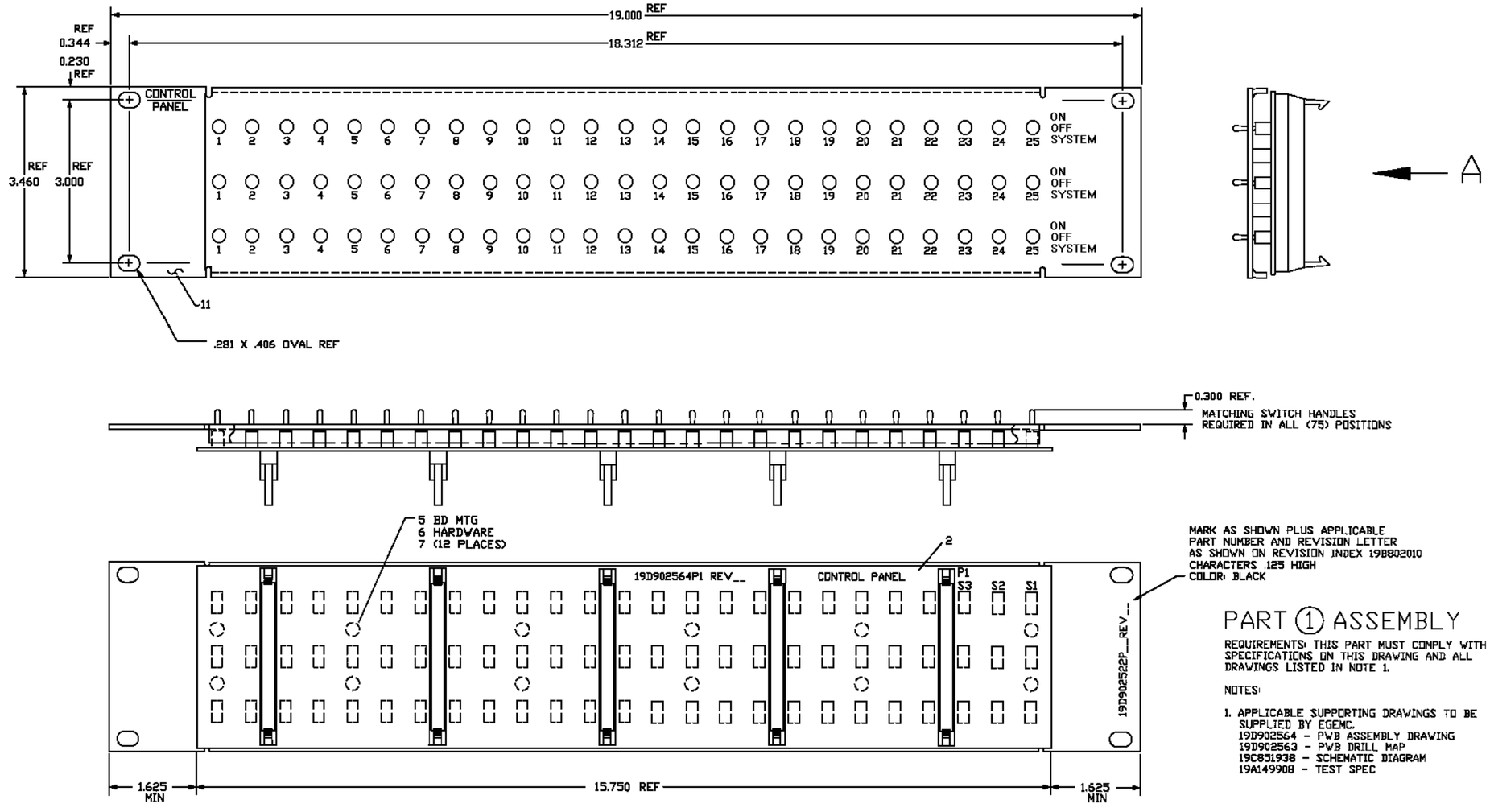


Figure 4 - Typical GPS Simulcast System Configuration

CONTROL PANEL ASSEMBLY
19D902522P1, P2 & P3

SYMBOL	PART NUMBER	DESCRIPTION
		----CONNECTORS----
P1 thru P5	19B235546P1	Male, Eject, Pin 50 positions: Sim to AMP 1-102154-0.
		----SWITCHES----
S1 thru S75	ATIEG-PC-1	3 Position, PSDT, Lever.
		----MISCELLANEOUS----
1	19D902564P1	Control Panel *(19D902522P1)*.
	19D902564P2	Control Panel *(19D902522P2&P3)*.
5		Screw: No. 6-32 x 5/16.
6		Washer: No. 6F.
7		Washer: No. 6SL.
8	19B235546P3	Latch: Sim to AMP 102320-1.
11	19C337409P1	Nameplate.
12	BSOA63214	Standoff, threaded-self clinch.

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES.



VIEW 'A'

PART (1) ASSEMBLY

REQUIREMENTS: THIS PART MUST COMPLY WITH ALL SPECIFICATIONS ON THIS DRAWING AND ALL DRAWINGS LISTED IN NOTE 1.

NOTES:

1. APPLICABLE SUPPORTING DRAWINGS TO BE SUPPLIED BY EGEMC.
   19D902564 - PWB ASSEMBLY DRAWING
   19D902563 - PWB DRILL MAP
   19C851938 - SCHEMATIC DIAGRAM
   19A149908 - TEST SPEC

PURCHASE FROM AN APPROVED VENDOR

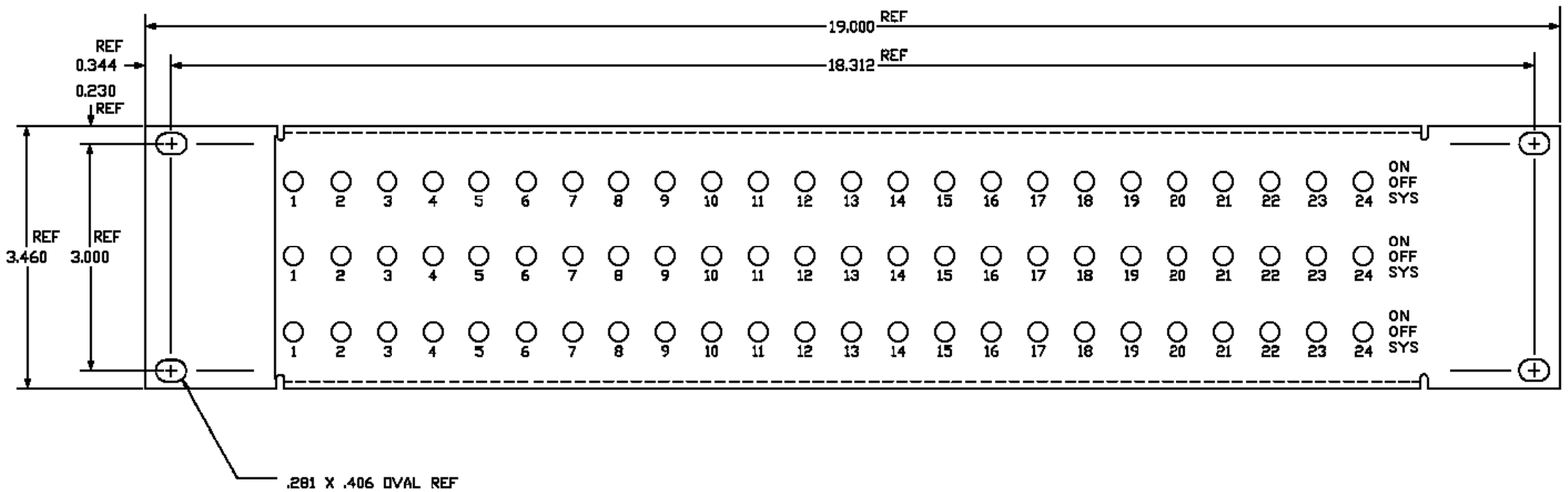
PURCHASING TO SUPPLY VENDOR WITH COPIES OF THIS DRAWING 19A705362 AND 19A700070 PLUS ALL DRAWINGS LISTED IN NOTE 1

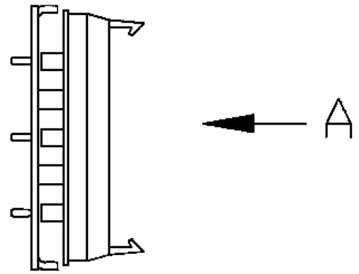
MATERIAL MUST MEET G.E. INCOMING INSPECTION & TEST SAMPLE PER 19A700070

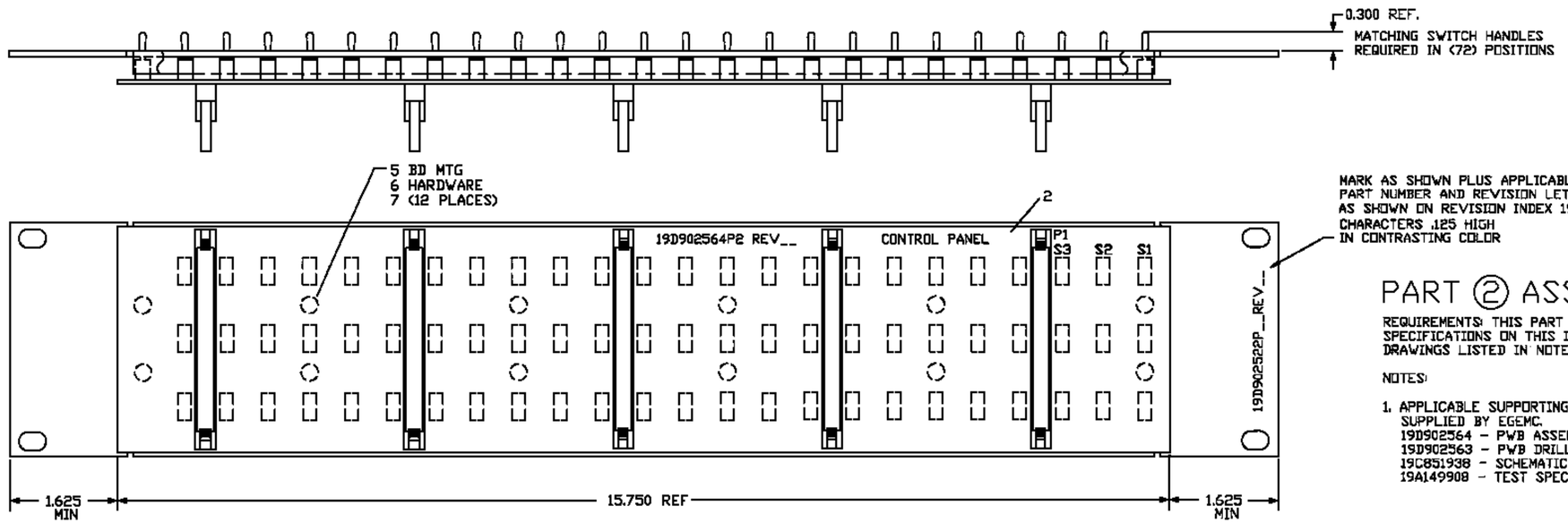
THIS DRAWING SUBJECT TO THE PROVISIONS OF 19A700070

CONTROL PANEL *(PART 1)*

(Made from 19D902522, Sh. 1, Rev. 7A)







PART (2) ASSEMBLY

REQUIREMENTS: THIS PART MUST COMPLY WITH ALL SPECIFICATIONS ON THIS DRAWING AND ALL DRAWINGS LISTED IN NOTE 1.

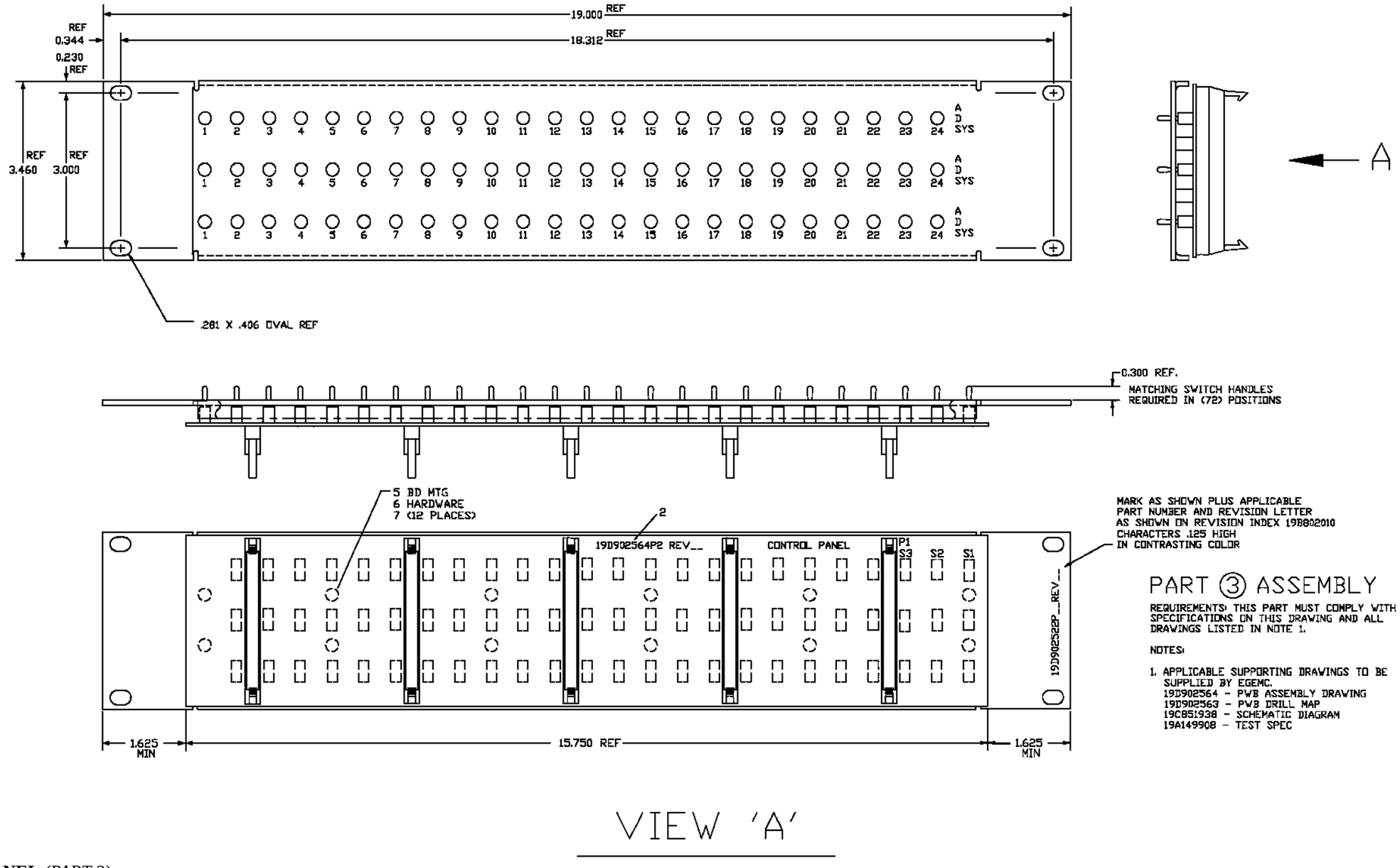
NOTES:

1. APPLICABLE SUPPORTING DRAWINGS TO BE SUPPLIED BY EGEMC.
   19D902564 - PWB ASSEMBLY DRAWING
   19D902563 - PWB DRILL MAP
   19C851938 - SCHEMATIC DIAGRAM
   19A149908 - TEST SPEC

VIEW 'A'

CONTROL PANEL *(PART 2)*

(Made from 19D902522, Sh. 3, Rev. 7A)



PART ③ ASSEMBLY

REQUIREMENTS: THIS PART MUST COMPLY WITH ALL SPECIFICATIONS ON THIS DRAWING AND ALL DRAWINGS LISTED IN NOTE 1.

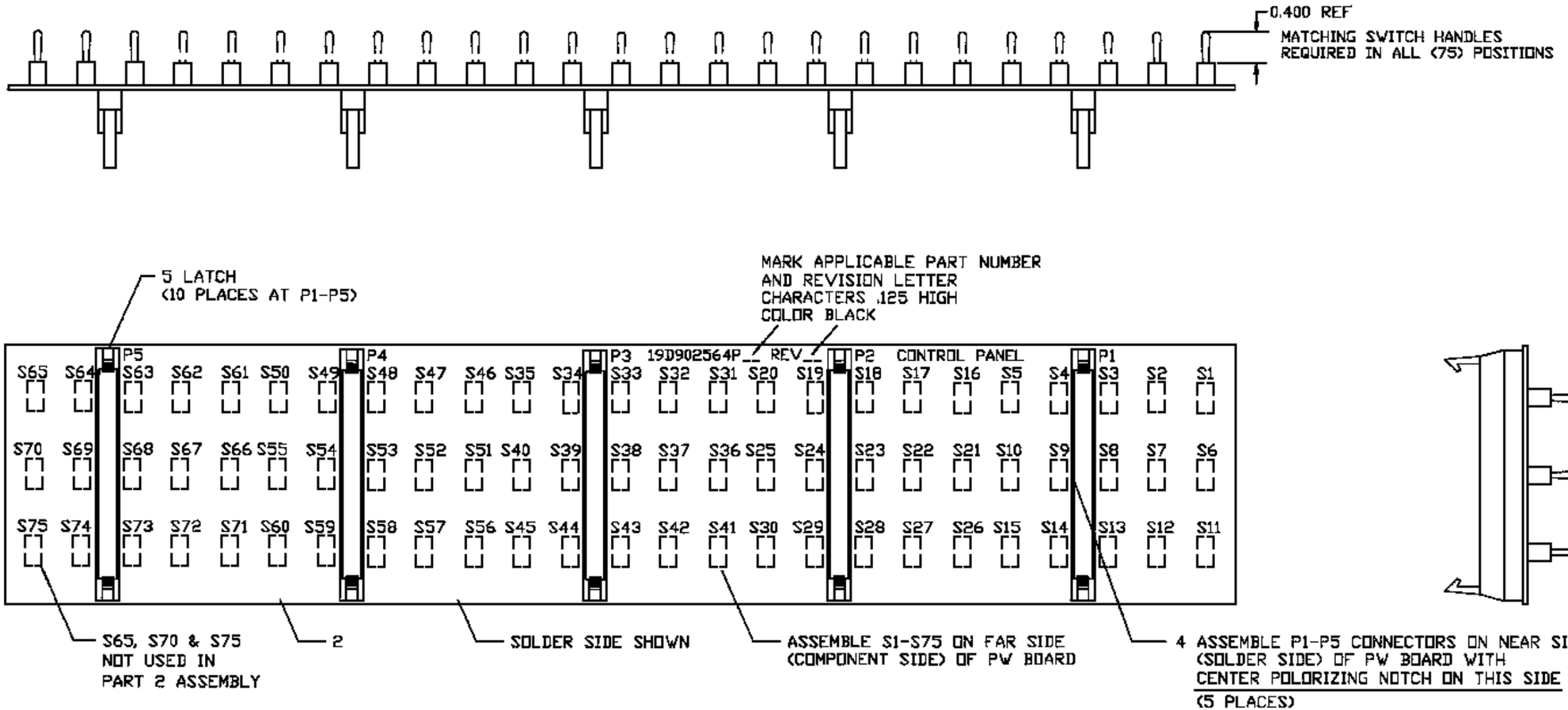
NOTES:

1. APPLICABLE SUPPORTING DRAWINGS TO BE SUPPLIED BY EGEMC.
   19D902564 - PWB ASSEMBLY DRAWING
   19D902563 - PWB DRILL MAP
   19C851938 - SCHEMATIC DIAGRAM
   19A149908 - TEST SPEC

VIEW 'A'

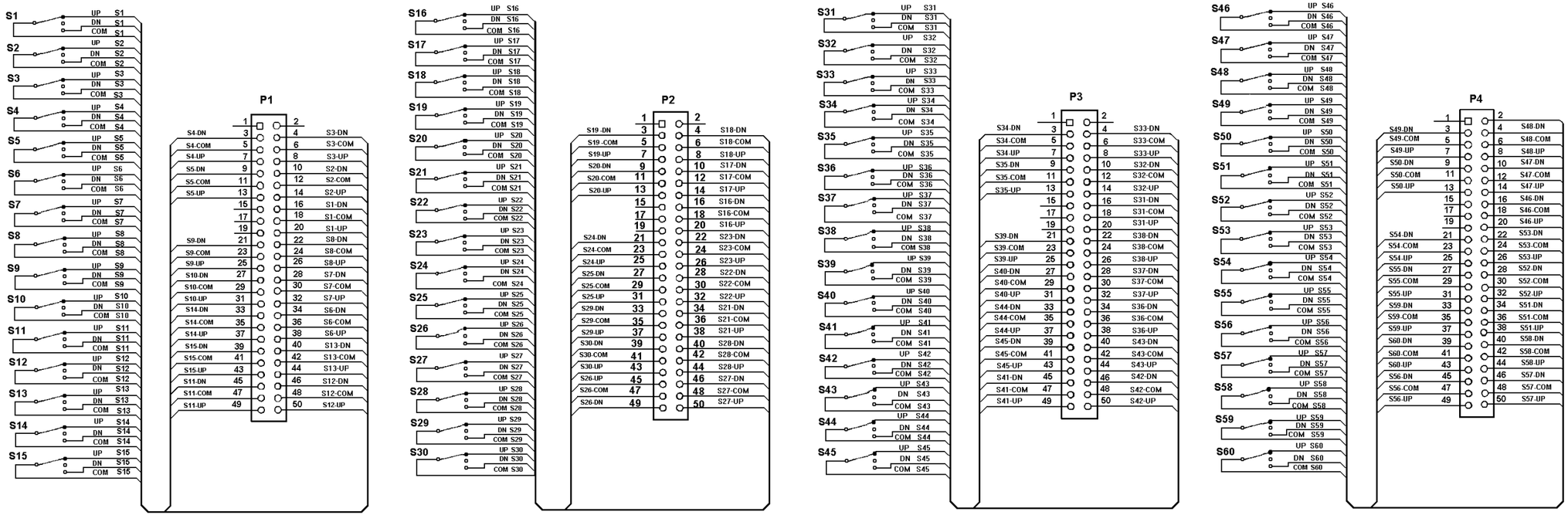
CONTROL PANEL *(PART 3)*

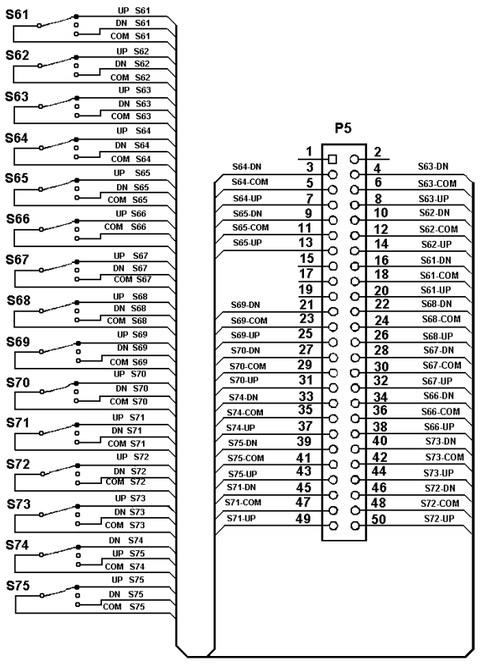
(Made from 19D902522, Sh. 5, Rev. 7A)



CONTROL PANEL CIRCUIT BOARD

(19D902564, Sh. 1, Rev. 1)





NOTE:
S65, S70 & S75 NOT PRESENT
ON 19D902564P2 PANEL.

CONTROL PANEL

(19C851938, Rev. 1A)

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