

**CHAPTER**

**24**

**ELECTRICAL POWER**

CHAPTER 24  
ELECTRICAL POWER

CH-SC-SU	Schem	Page	Sheet	Date	CH-SC-SU	Schem	Page	Sheet	Date
24-EFFECTIVE PAGES					24-21-31				
		1 thru 3		Jun 21/2016	R		101		Jun 21/2016
		4		BLANK					
24-CONTENTS					24-21-51				
R		1		Jun 21/2016	R		101		Jun 21/2016
R		2		Jun 21/2016					
R		3		Jun 21/2016	R		101		Jun 21/2016
		4		BLANK					
24-ALPHABETICAL INDEX					24-22-11				
		1		Aug 15/2013	R		101		Jun 21/2016
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24-00-00					24-22-21				
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R		101		Jun 21/2016	R		101		Jun 21/2016
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R		101		Jun 21/2016	R		101		Jun 21/2016
					24-24-11				
					R		101		Jun 21/2016
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## 24-EFFECTIVE PAGES

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CH-SC-SU	Schem	Page	Sheet	Date	CH-SC-SU	Schem	Page	Sheet	Date
R	24-24-31	101		Jun 21/2016	R	24-33-13	101		Jun 21/2016
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R	24-28-21	101		Jun 21/2016	R	24-41-11	101		Jun 21/2016
R	24-28-22	101		Jun 21/2016	R	24-51-11	101	1	Mar 14/2016
R	24-28-31	101		Jun 21/2016				2	Mar 14/2016
R	24-28-41	101		Jun 21/2016	R		102	1	Jun 21/2016
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R		102		Jun 21/2016		24-51-21	101	1	Mar 14/2016
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	24-31-12				R			2	Jun 21/2016
R		101		Jun 21/2016		24-52-11			
	24-32-11				R		101	1	Jun 21/2016
R		101		Jun 21/2016	R			2	Jun 21/2016
	24-33-11					24-53-11			
R		101		Jun 21/2016	R		101	1	Jun 21/2016
	24-33-12				R			2	Jun 21/2016
R		101		Jun 21/2016		24-54-11			
					R		101		Jun 21/2016

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CH-SC-SU	Schem	Page	Sheet	Date	CH-SC-SU	Schem	Page	Sheet	Date
24-61-11									
R		101		Jun 21/2016					

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	Title	CH-SC-SU	Schem	Page	Sheet	Date	Effectivity
	<b><u>ELECTRICAL POWER</u></b>						
	ELECTRICAL POWER SIMPLIFIED	24-00-00		101		Mar 14/2016	YT101-YT120
I				102		Jun 21/2016	YT126-YT133
I	ELECTRICAL POWER UNIT LOCATION	24-00-10		101		Jun 21/2016	ALL
	<b><u>AC GENERATOR DRIVE SYSTEM</u></b>						
I	IDG NO. 1	24-11-11		101		Jun 21/2016	ALL
I	IDG NO. 2	24-11-21		101		Jun 21/2016	ALL
	<b><u>AC GENERATION SYSTEM</u></b>						
I	GENERATOR POWER AND REGULATION - NO. 1	24-21-11		101		Jun 21/2016	ALL
I	GENERATOR POWER AND REGULATION - NO. 2	24-21-21		101		Jun 21/2016	ALL
I	GENERATOR POWER AND REGULATION - APU	24-21-31		101		Jun 21/2016	ALL
I	GENERATOR CONTROL UNITS BLOCK (G10, G12, G14)	24-21-51		101		Jun 21/2016	ALL
I	BUS POWER CONTROL UNIT BLOCK (G15)	24-21-52		101		Jun 21/2016	ALL
	<b><u>AC GENERATION CONTROL SYSTEM</u></b>						
I	GENERATOR CONTROL UNIT NO.1	24-22-11		101		Jun 21/2016	ALL
I	GENERATOR CONTROL UNIT NO.2	24-22-21		101		Jun 21/2016	ALL
I	GENERATOR CONTROL UNIT APU	24-22-31		101		Jun 21/2016	ALL
	<b><u>AC GENERATION BUS CONTROL</u></b>						
I	TRANSFER BUS CONTROL NO.1	24-23-11		101		Jun 21/2016	ALL
I	TRANSFER BUS CONTROL NO.2	24-23-21		101		Jun 21/2016	ALL
I	AC TIE BUS	24-23-31		101		Jun 21/2016	ALL
I	GROUND SERVICE BUS CONTROL	24-23-51		101		Jun 21/2016	ALL

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	Title	CH-SC-SU	Schem	Page	Sheet	Date	Effectivity
	<b><u>DIFFERENTIAL CURRENT PROTECTION</u></b>						
I	DIFFERENTIAL CURRENT PROTECTION GEN NO.1	24-24-11		101		Jun 21/2016	ALL
I	DIFFERENTIAL CURRENT PROTECTION GEN NO.2	24-24-21		101		Jun 21/2016	ALL
I	DIFFERENTIAL CURRENT PROTECTION APU GEN	24-24-31		101		Jun 21/2016	ALL
	<b><u>AC GENERATION METERS</u></b>						
I	AC INDICATION P5-13	24-28-11		101		Jun 21/2016	ALL
I	AC SYSTEM GENERATOR & APU INDICATION P5-4	24-28-21		101		Jun 21/2016	ALL
I	SWITCHING P5-4	24-28-22		101		Jun 21/2016	ALL
I	GENERATOR DRIVE & STANDBY POWER SWITCHING INDICATION P5-5	24-28-31		101		Jun 21/2016	ALL
	AUTOMATIC LOAD SHED GALLEYS & MAIN BUSES	24-28-41		101		Mar 14/2016	YT101-YT120
I				102		Jun 21/2016	YT126-YT133
	<b><u>DC GENERATION SYSTEM</u></b>						
I	BATTERY AND BATTERY CHARGER	24-31-11		101		Jun 21/2016	ALL
I	BATTERY BUS	24-31-12		101		Jun 21/2016	ALL
	<b><u>MAIN DC BUSES</u></b>						
I	MAIN DC BUSES	24-32-11		101		Jun 21/2016	ALL
	<b><u>DC GENERATION SYSTEM AND INDICATIONS</u></b>						
I	DC VOLTAGE AND CURRENT INDICATIONS	24-33-11		101		Jun 21/2016	ALL
I	ELEC LIGHT AND ALPHANUMERIC DISPLAY	24-33-12		101		Jun 21/2016	ALL
I	DC BUS INDICATION DFDAU	24-33-13		101		Jun 21/2016	ALL
	<b><u>STANDBY POWER SYSTEM</u></b>						
I	STANDBY POWER	24-34-11		101		Jun 21/2016	ALL

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Title	CH-SC-SU	Schem	Page	Sheet	Date	Effectivity
<b><u>AC EXTERNAL POWER</u></b>						
EXTERNAL POWER	24-41-11		101		Jun 21/2016	ALL
<b><u>MAIN 115-VOLT AC POWER DISTRIBUTION</u></b>						
115V AC TRANSFER BUS 1	24-51-11		101	1	Mar 14/2016	YT101-YT120
				2	Mar 14/2016	YT101-YT120
				1	Jun 21/2016	YT126-YT133
				2	Jun 21/2016	YT126-YT133
115V AC TRANSFER BUS 2	24-51-21		101	1	Mar 14/2016	YT101-YT120
				2	Mar 14/2016	YT101-YT120
				1	Jun 21/2016	YT126-YT133
				2	Jun 21/2016	YT126-YT133
<b><u>GROUND SERVICE 115-VOLT AC POWER DISTRIBUTION</u></b>						
115V AC GROUND SERVICE BUS	24-52-11		101	1	Jun 21/2016	ALL
				2	Jun 21/2016	ALL
<b><u>28V AC BUSES</u></b>						
28V AC BUSES	24-53-11		101	1	Jun 21/2016	ALL
				2	Jun 21/2016	ALL
<b><u>115V AC STANDBY BUS</u></b>						
115V AC STANDBY BUS	24-54-11		101		Jun 21/2016	ALL
<b><u>DC POWER DISTRIBUTION</u></b>						
28V DC BUSES	24-61-11		101		Jun 21/2016	ALL

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CH-SC-SU	Title
24-52-11	115V AC GROUND SERVICE BUS
24-54-11	115V AC STANDBY BUS
24-51-11	115V AC TRANSFER BUS 1
24-51-21	115V AC TRANSFER BUS 2
24-53-11	28V AC BUSES
24-61-11	28V DC BUSES
24-28-11	AC INDICATION P5-13
24-28-21	AC SYSTEM GENERATOR & APU INDICATION P5-4
24-23-31	AC TIE BUS
24-28-41	AUTOMATIC LOAD SHED GALLEYS & MAIN BUSES
24-31-11	BATTERY AND BATTERY CHARGER
24-31-12	BATTERY BUS
24-21-52	BUS POWER CONTROL UNIT BLOCK (G15)
24-33-13	DC BUS INDICATION DFDAU
24-33-11	DC VOLTAGE AND CURRENT INDICATIONS
24-24-31	DIFFERENTIAL CURRENT PROTECTION APU GEN
24-24-11	DIFFERENTIAL CURRENT PROTECTION GEN NO.1
24-24-21	DIFFERENTIAL CURRENT PROTECTION GEN NO.2
24-33-12	ELEC LIGHT AND ALPHANUMERIC DISPLAY

CH-SC-SU	Title
24-00-00	ELECTRICAL POWER SIMPLIFIED
24-00-10	ELECTRICAL POWER UNIT LOCATION
24-41-11	EXTERNAL POWER
24-22-31	GENERATOR CONTROL UNIT APU
24-22-11	GENERATOR CONTROL UNIT NO.1
24-22-21	GENERATOR CONTROL UNIT NO.2
24-21-51	GENERATOR CONTROL UNITS BLOCK (G10, G12, G14)
24-28-31	GENERATOR DRIVE & STANDBY POWER SWITCHING INDICATION P5-5
24-21-31	GENERATOR POWER AND REGULATION - APU
24-21-11	GENERATOR POWER AND REGULATION - NO. 1
24-21-21	GENERATOR POWER AND REGULATION - NO. 2
24-23-51	GROUND SERVICE BUS CONTROL
24-11-11	IDG NO. 1
24-11-21	IDG NO. 2
24-32-11	MAIN DC BUSES
24-34-11	STANDBY POWER
24-28-22	SWITCHING P5-4
24-23-11	TRANSFER BUS CONTROL NO.1
24-23-21	TRANSFER BUS CONTROL NO.2

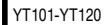
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Aug 15/2013

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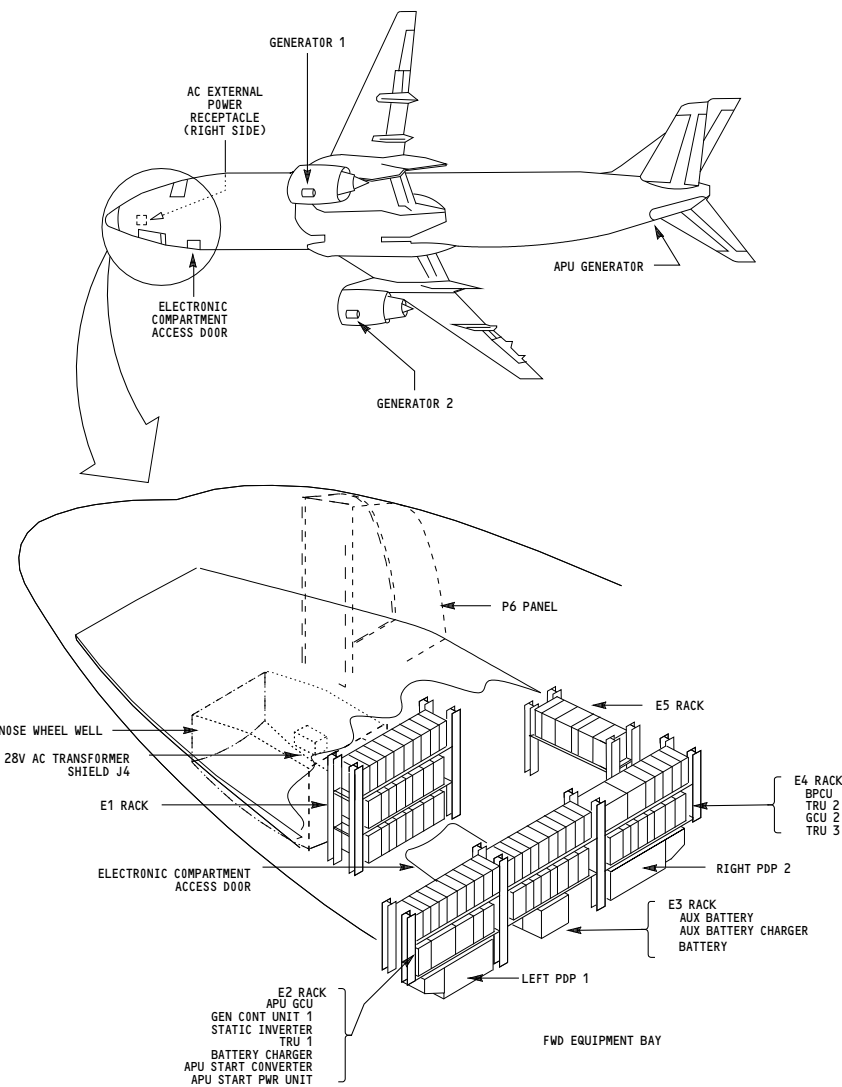
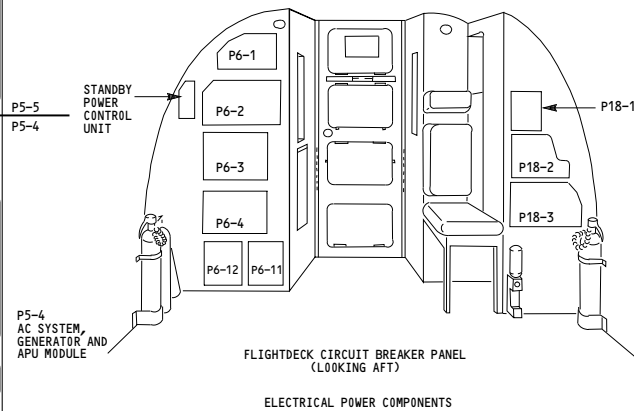
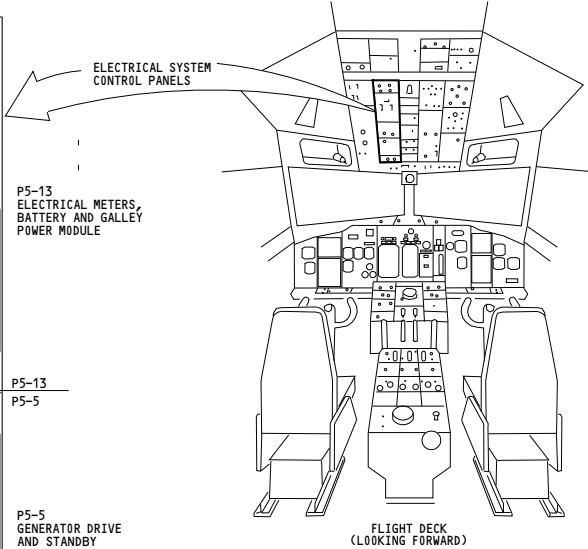
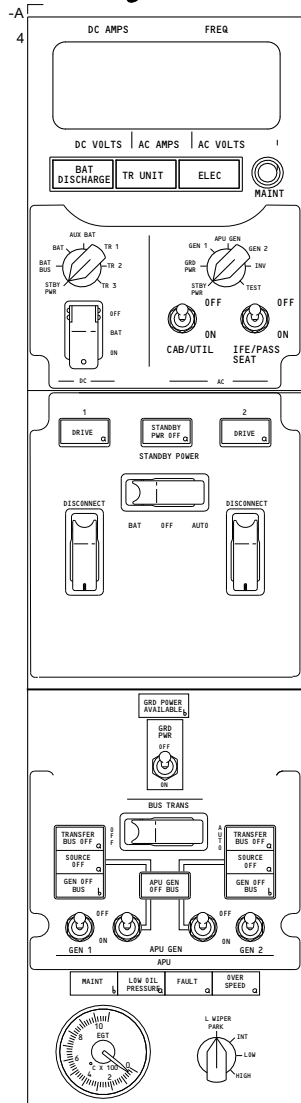
Mar 14/2016



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## ELECTRICAL POWER UNIT LOCATION

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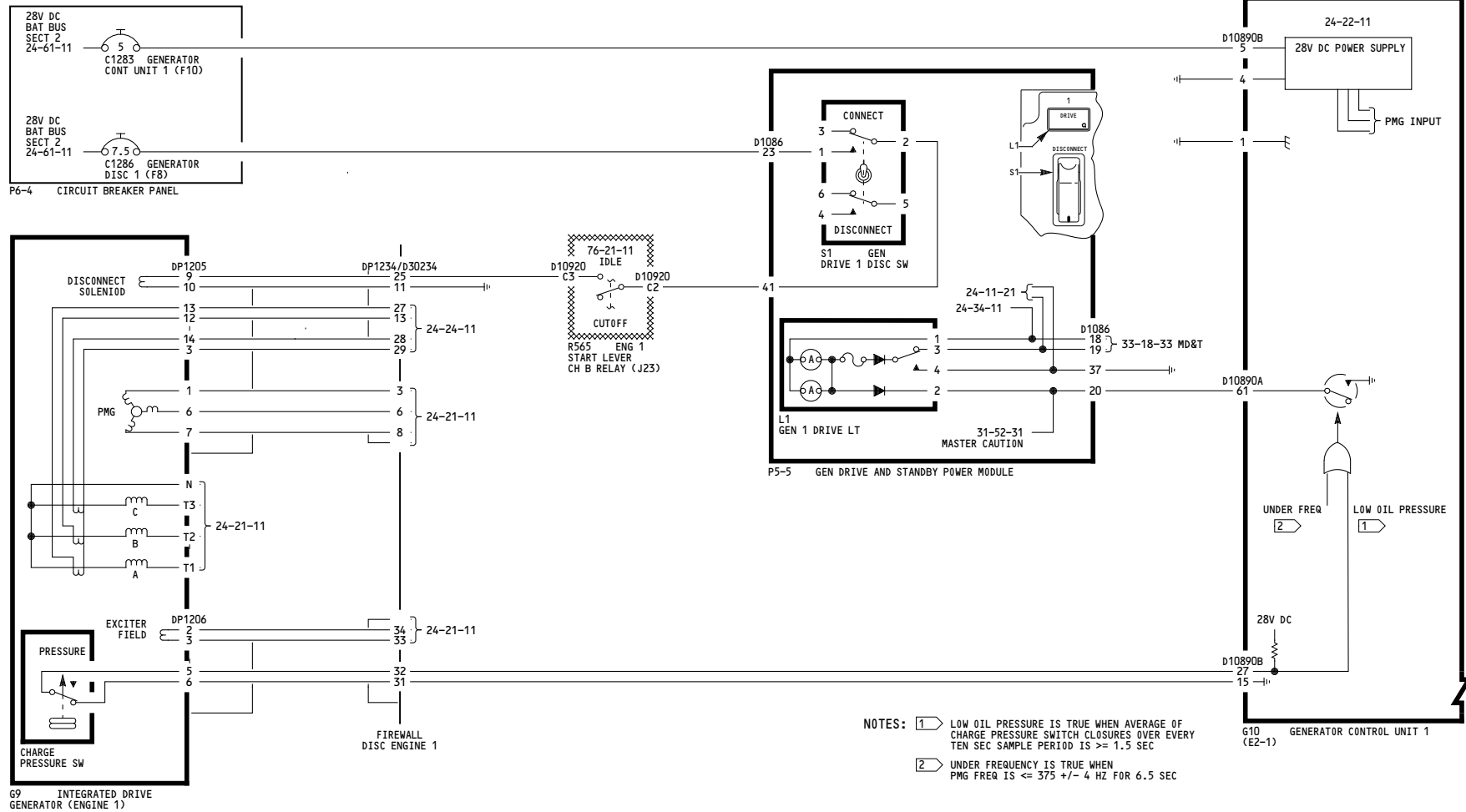
**24-00-10**

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WIRING DIAGRAMS  
24-11-11



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IDG NO. 1

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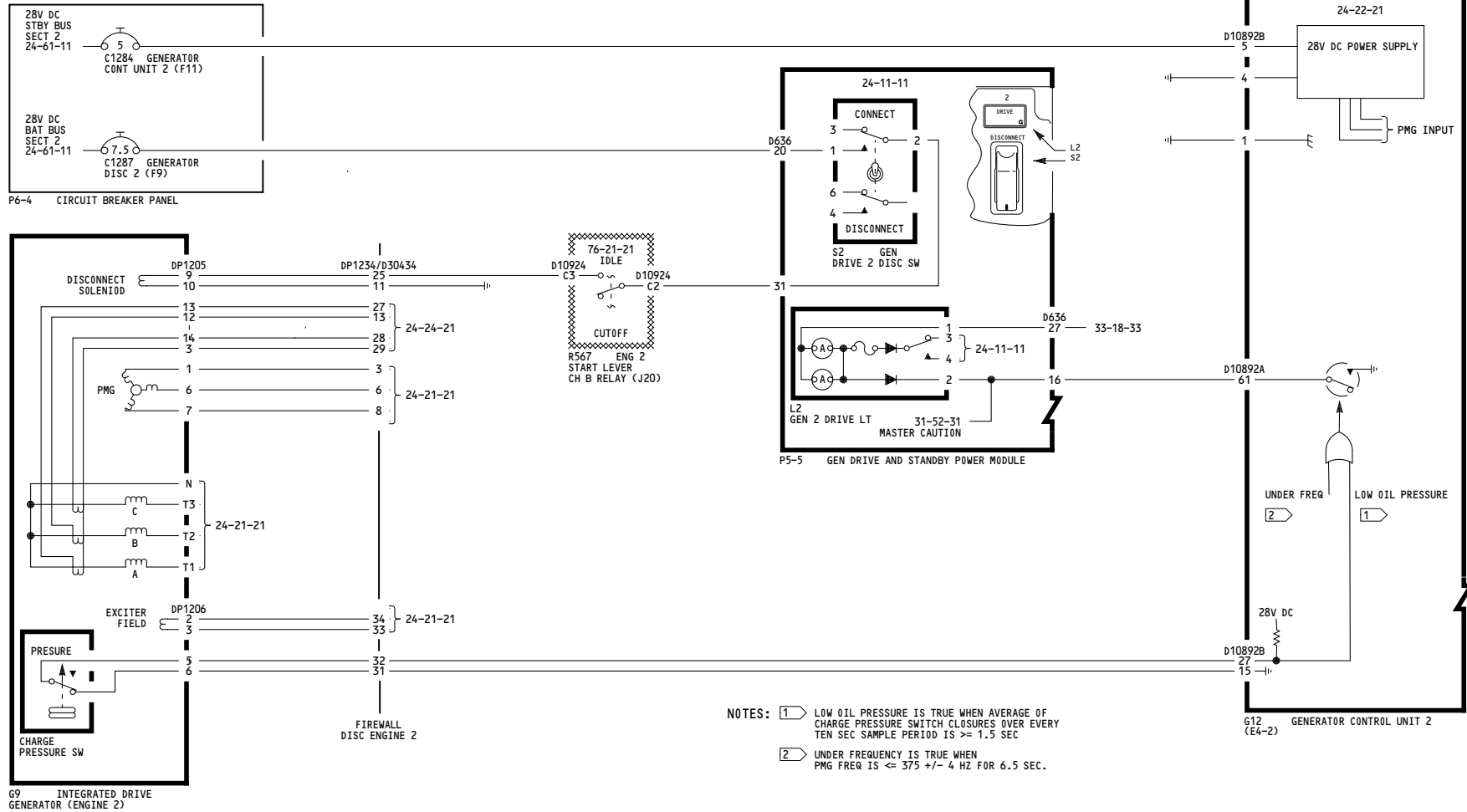
**24-11-11**

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## WIRING DIAGRAMS

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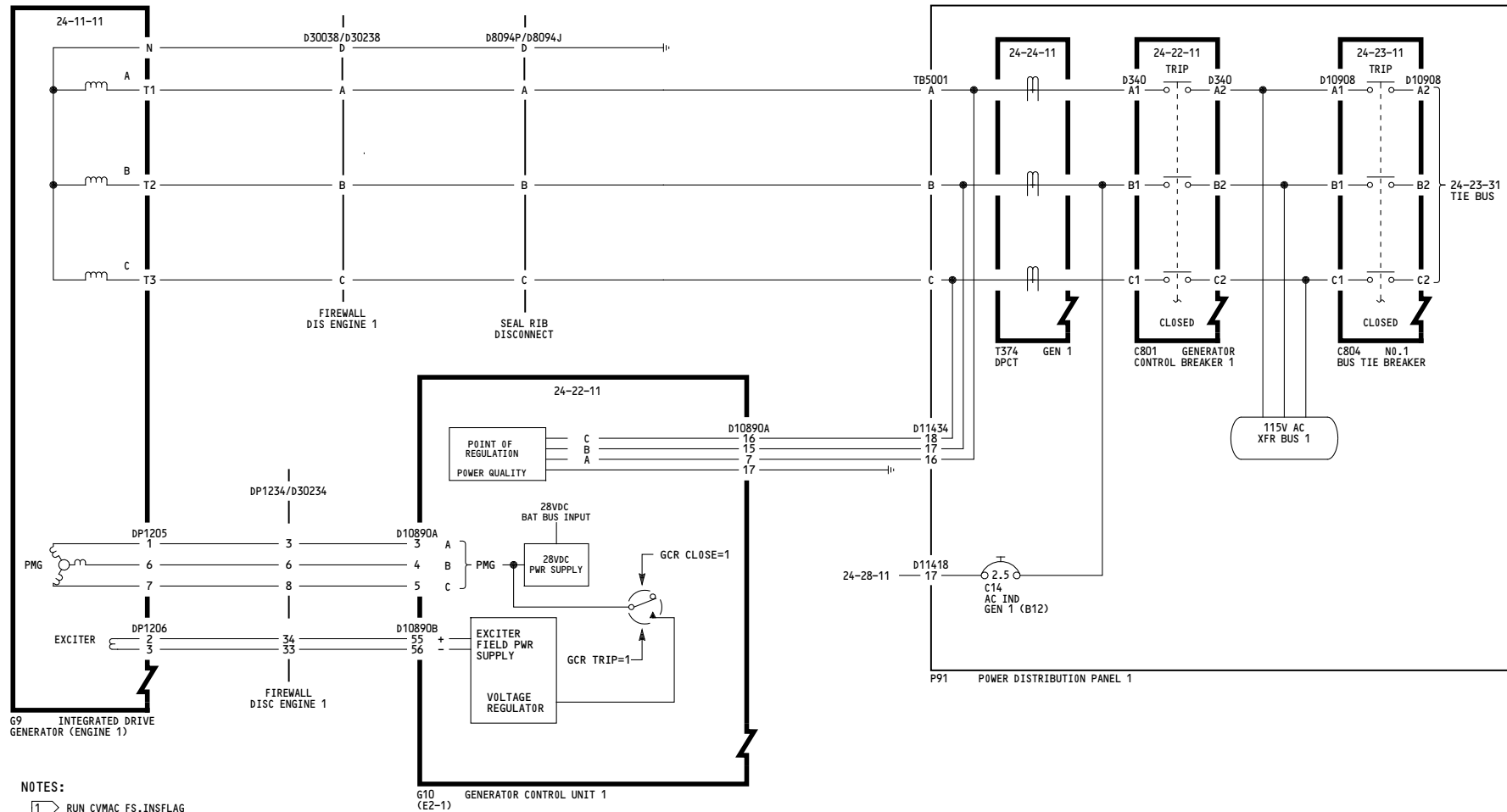
IDG NO. 2

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24-11-21

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NOTES:

- 1 RUN CVMAC FS-INSLAG
- 2

610 GENERATOR CONTROL UNIT 1  
(E2-1)

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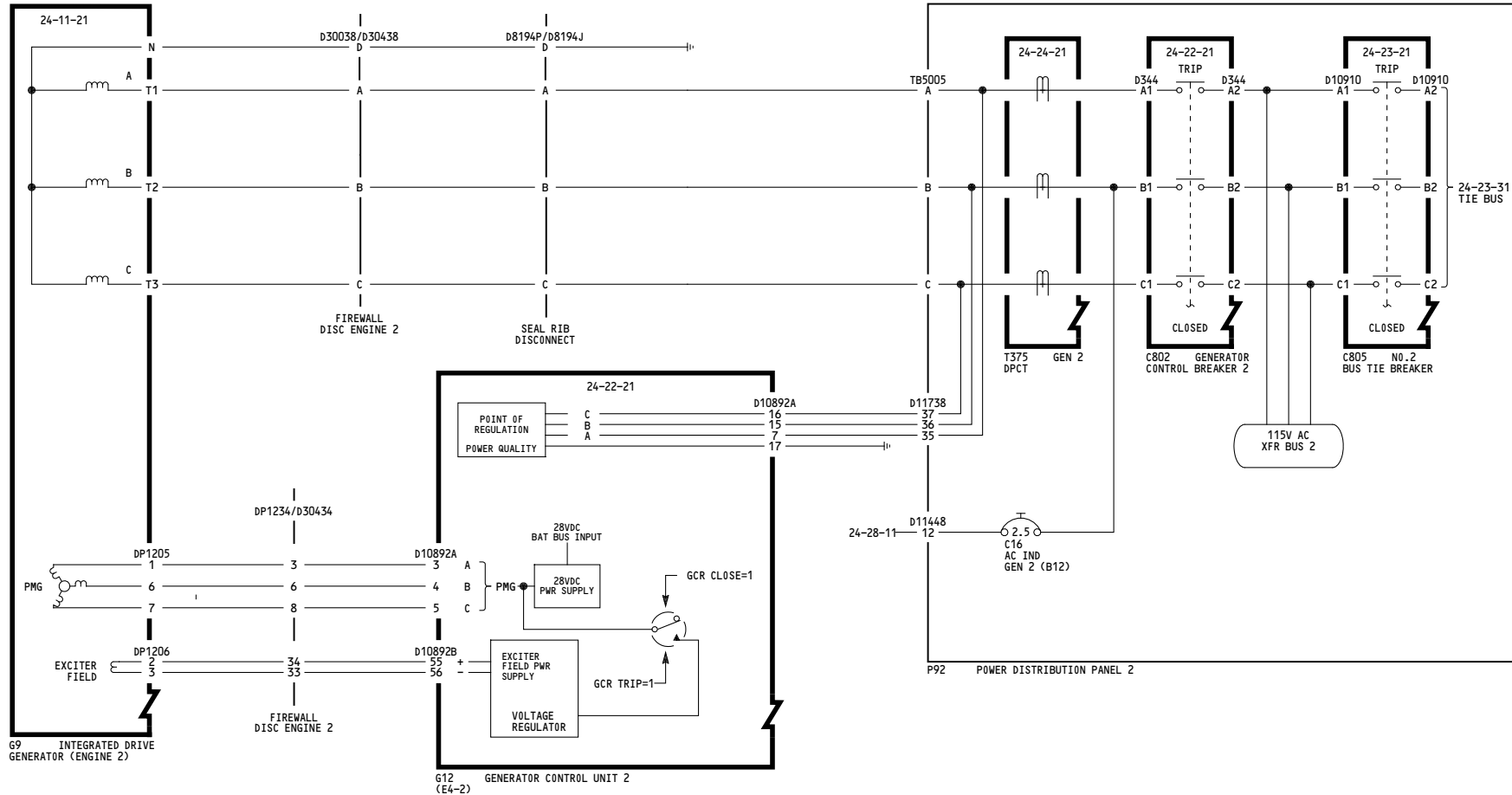
## GENERATOR POWER AND REGULATION - NO. 1

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## GENERATOR POWER AND REGULATION - NO. 2

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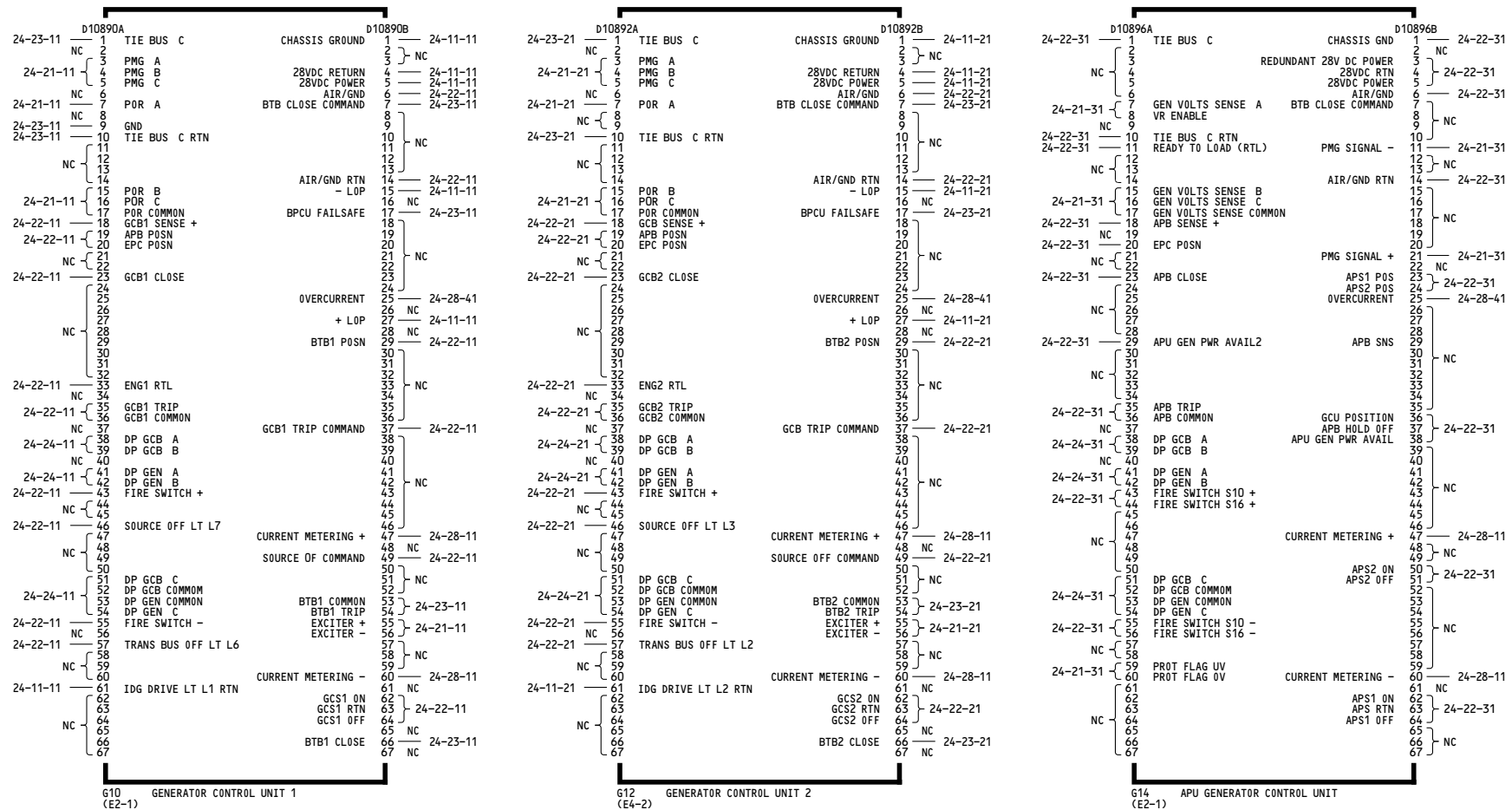
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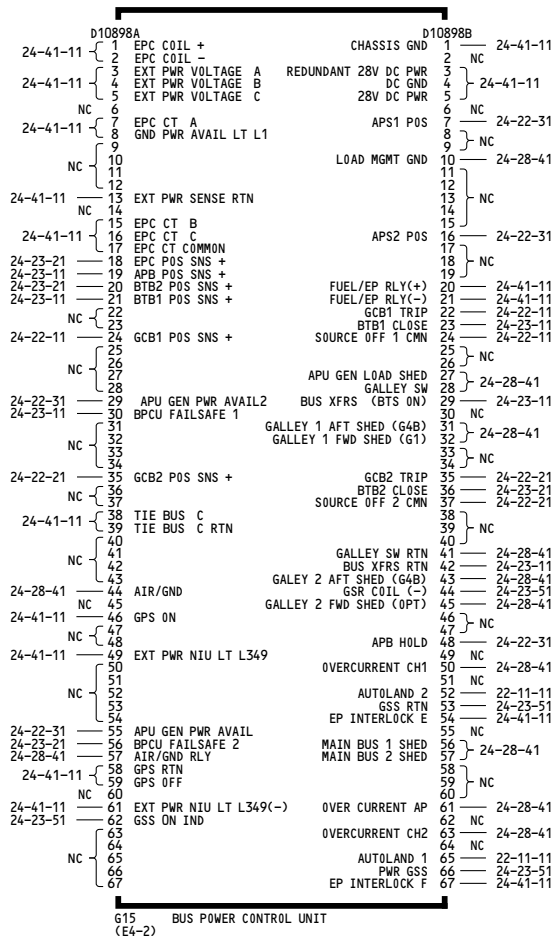
## GENERATOR CONTROL UNITS BLOCK (G10, G12, G14)

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## BUS POWER CONTROL UNIT BLOCK (G15)

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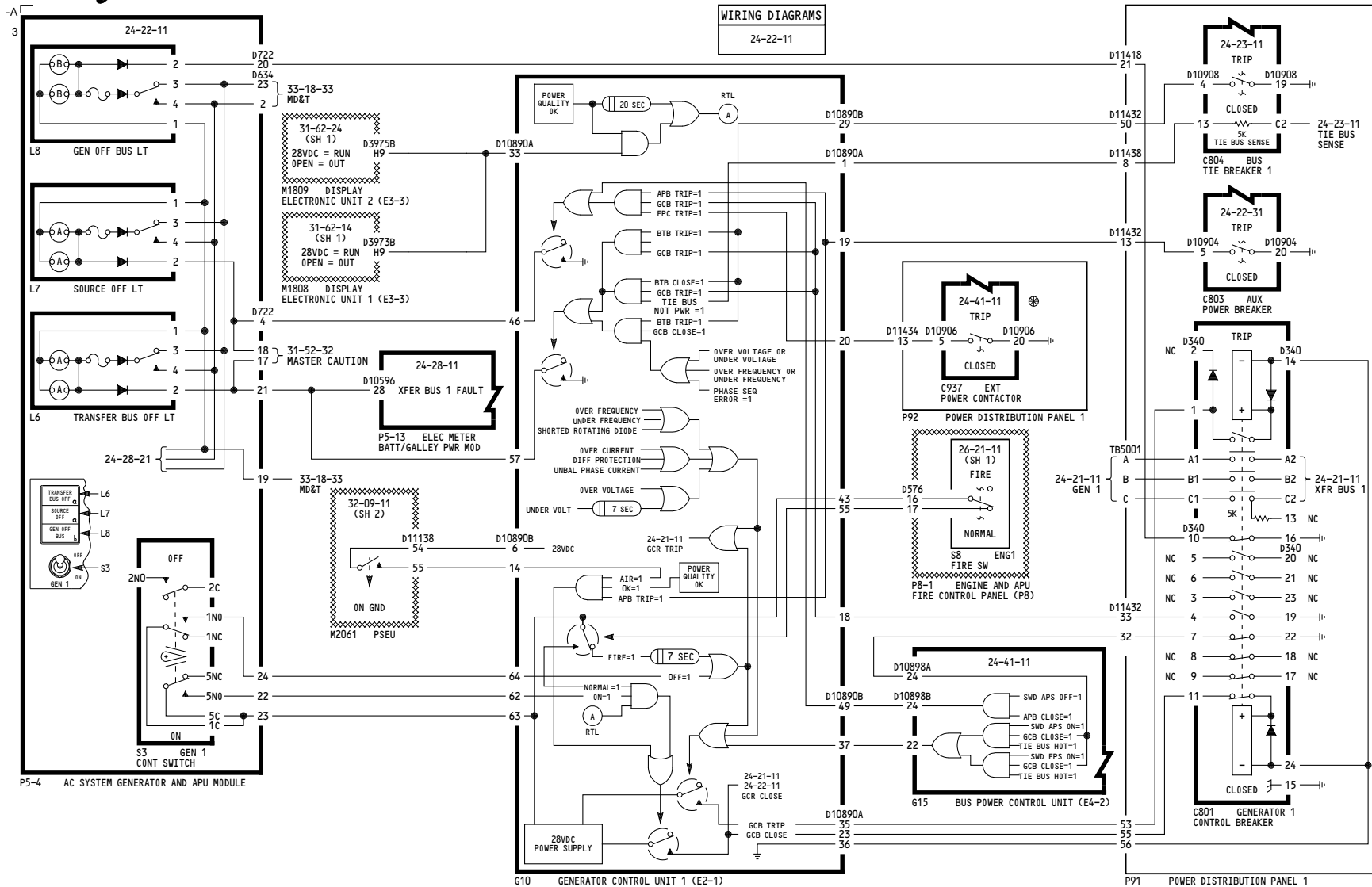
24-21-52

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## WIRING DIAGRAMS

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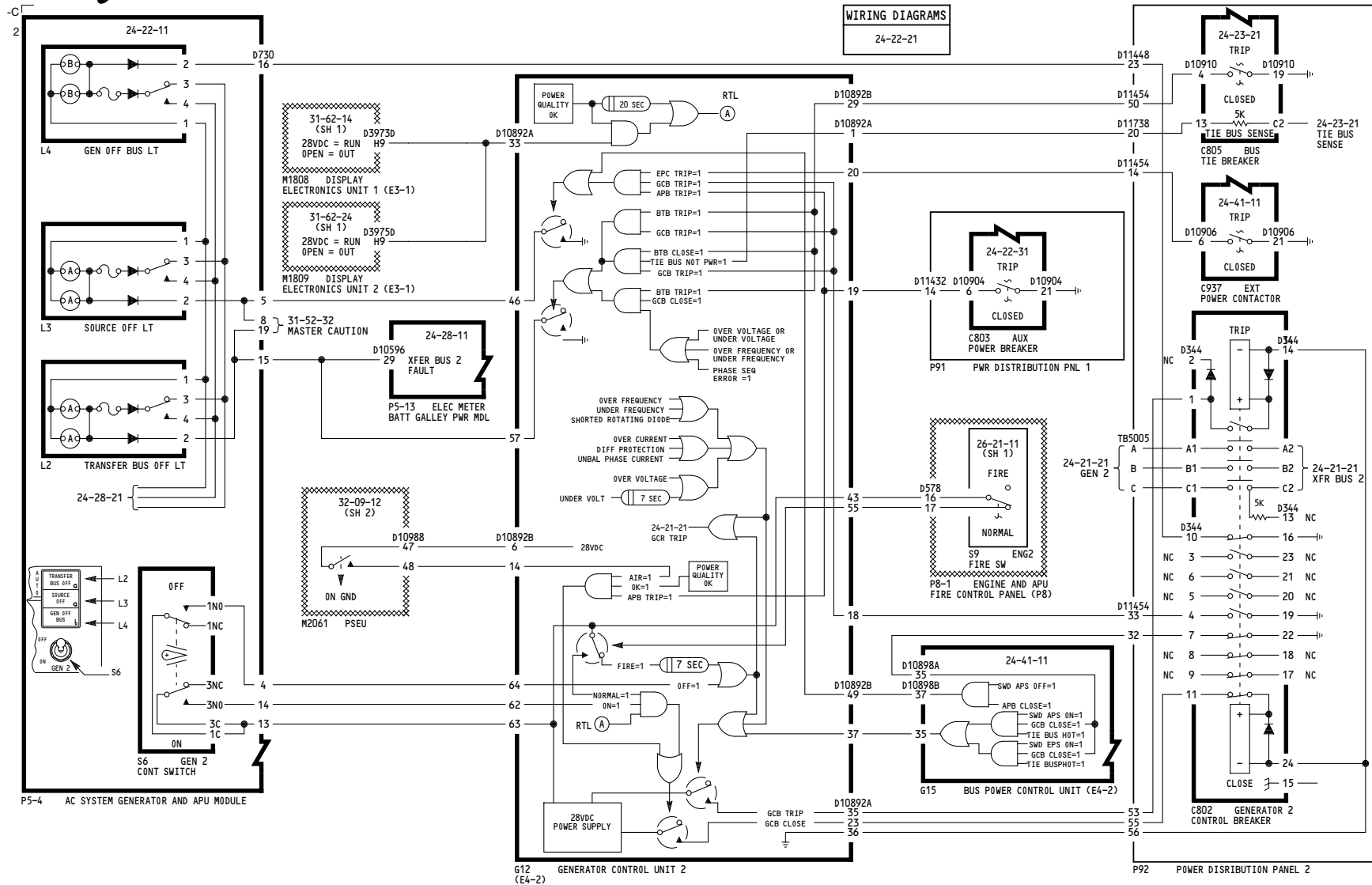
## GENERATOR CONTROL UNIT NO.1

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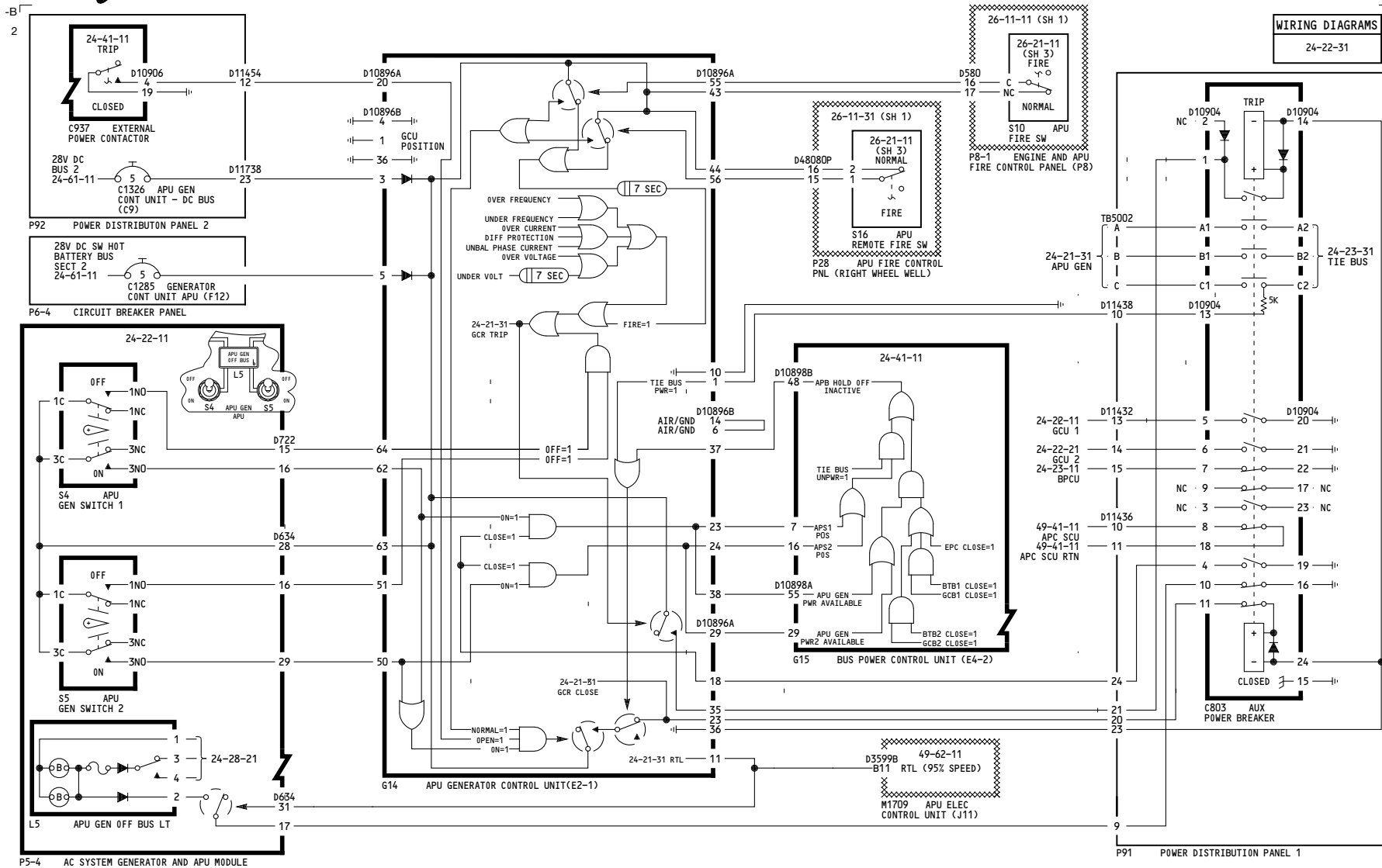
## GENERATOR CONTROL UNIT NO.2

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## GENERATOR CONTROL UNIT APU

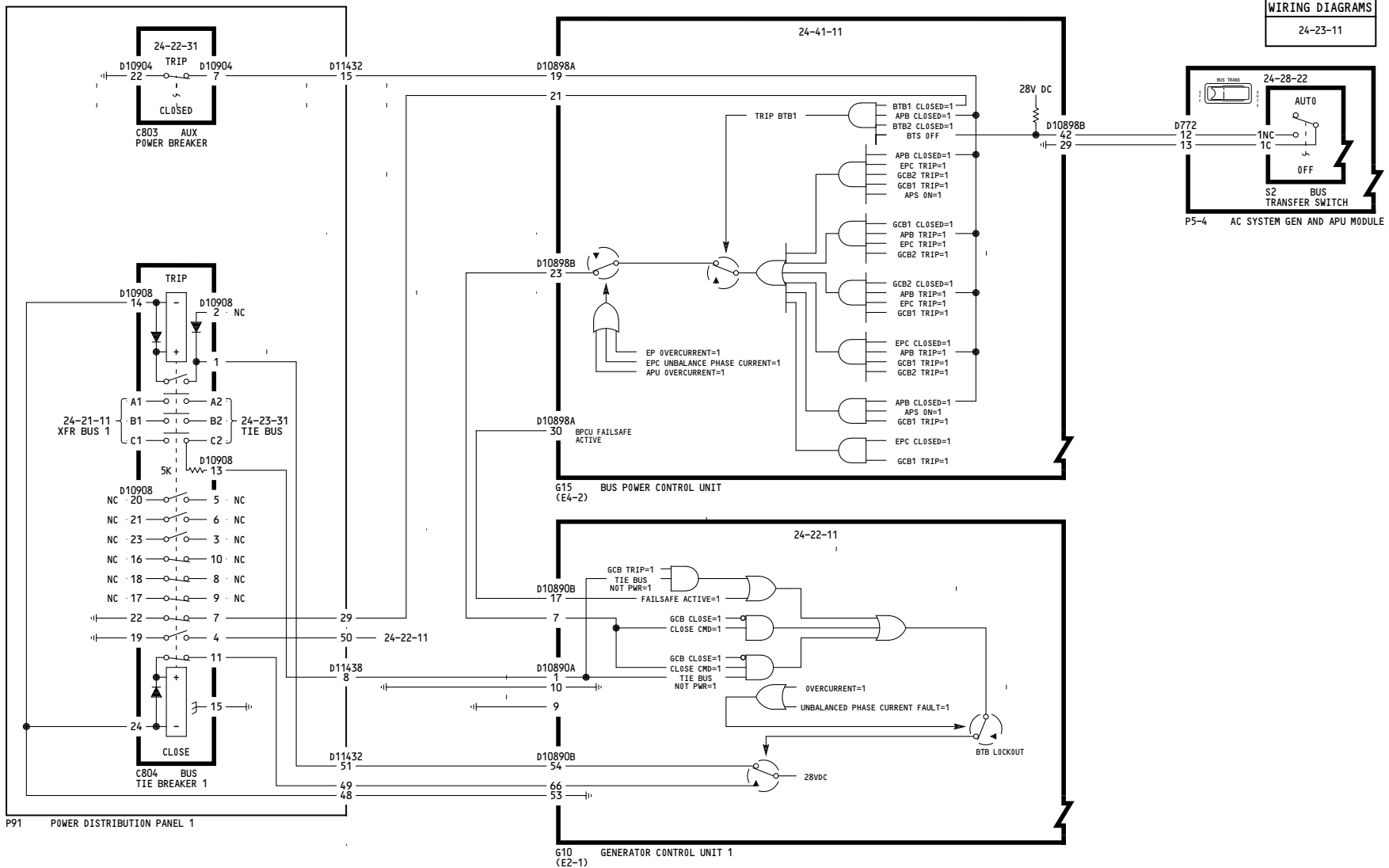
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## TRANSFER BUS CONTROL NO.1

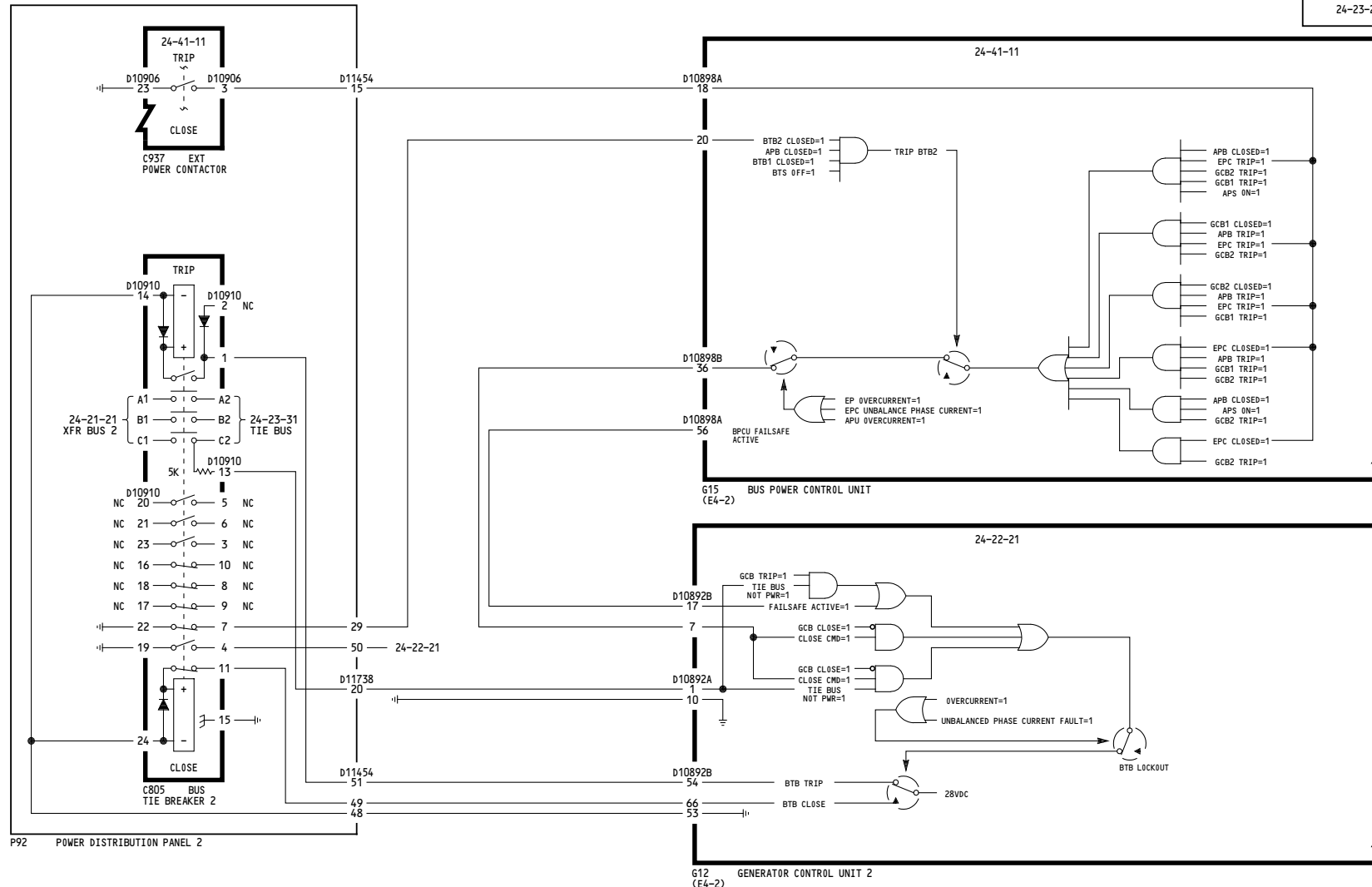
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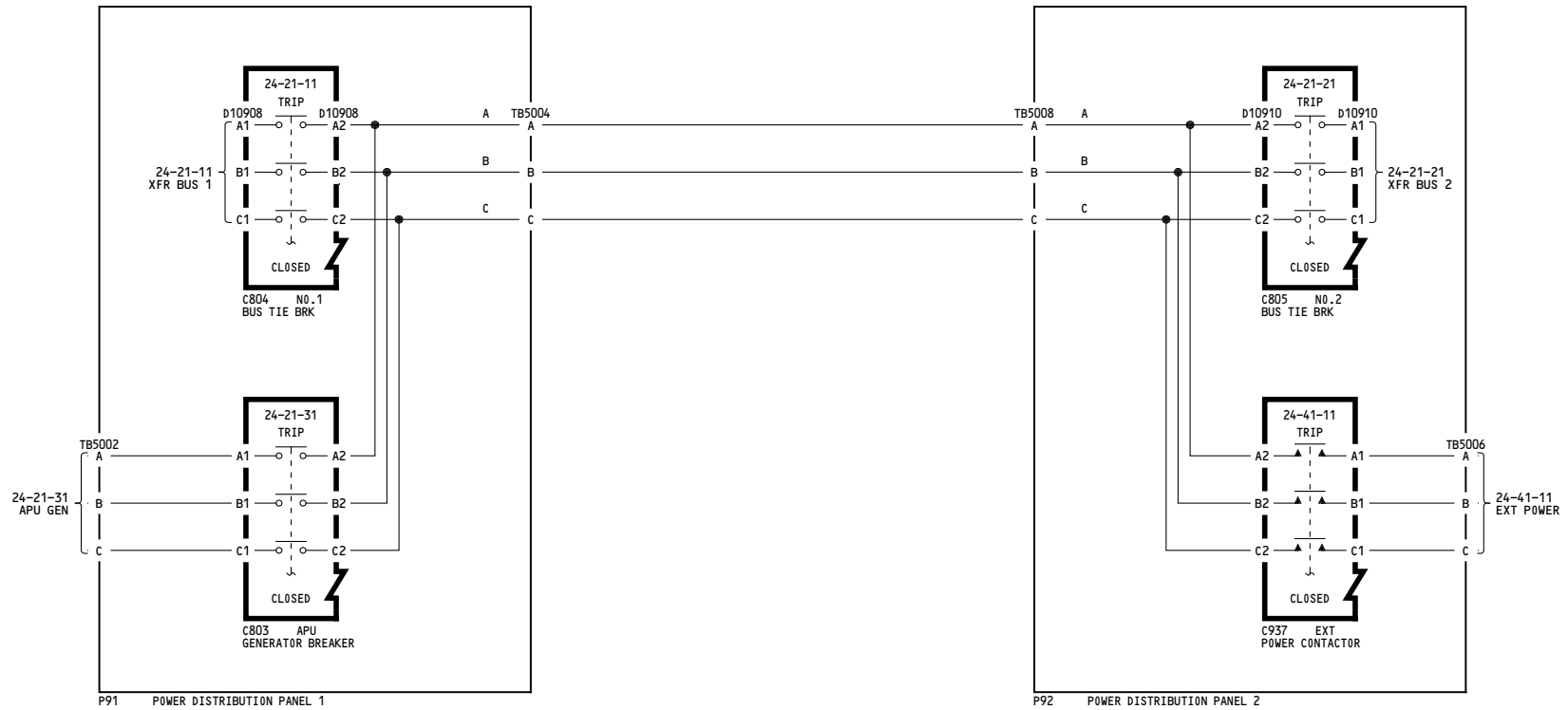
**TRANSFER BUS CONTROL  
NO.2**

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ALL	AC TIE BUS
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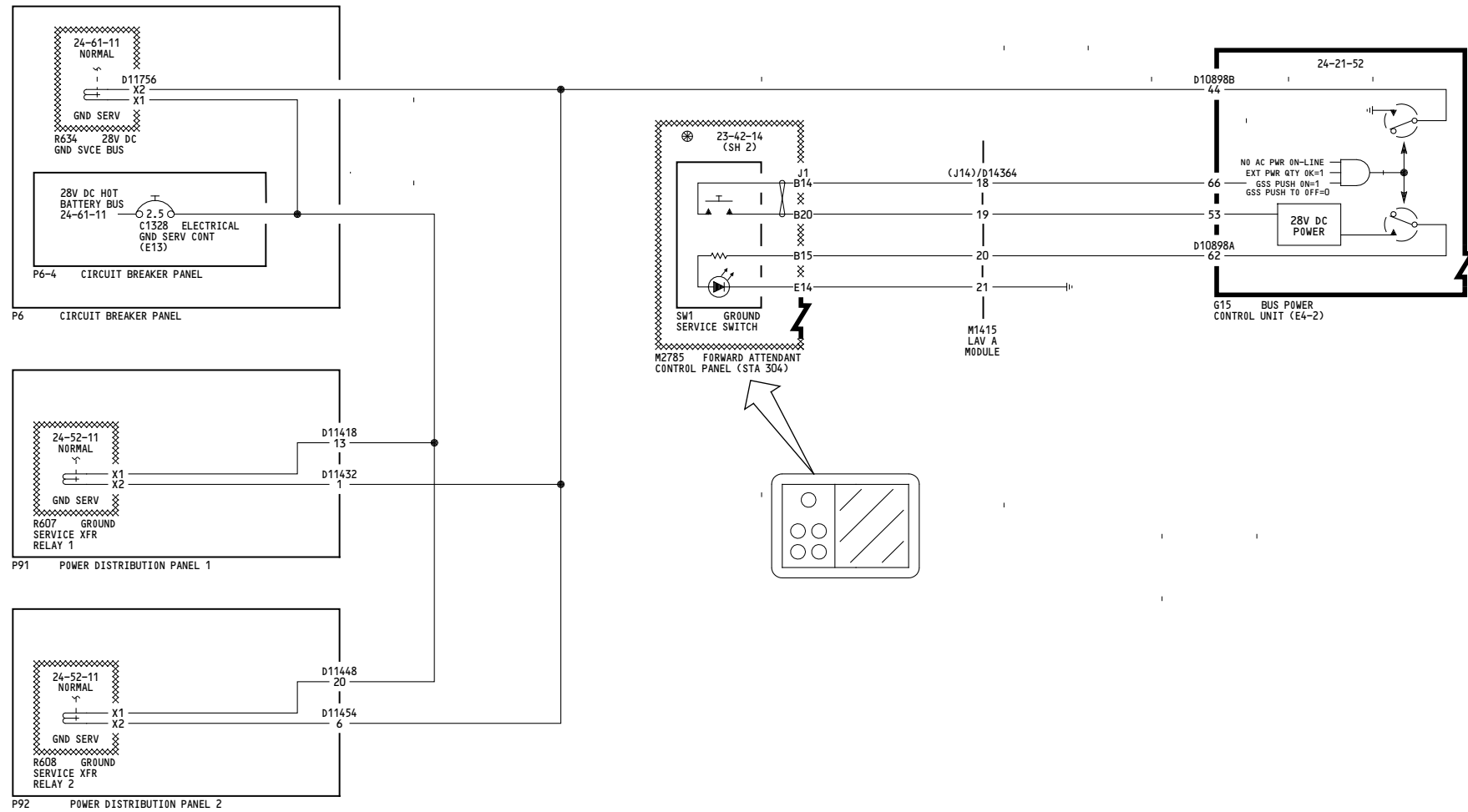
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24-23-51



ALL	GROUND SERVICE BUS CONTROL
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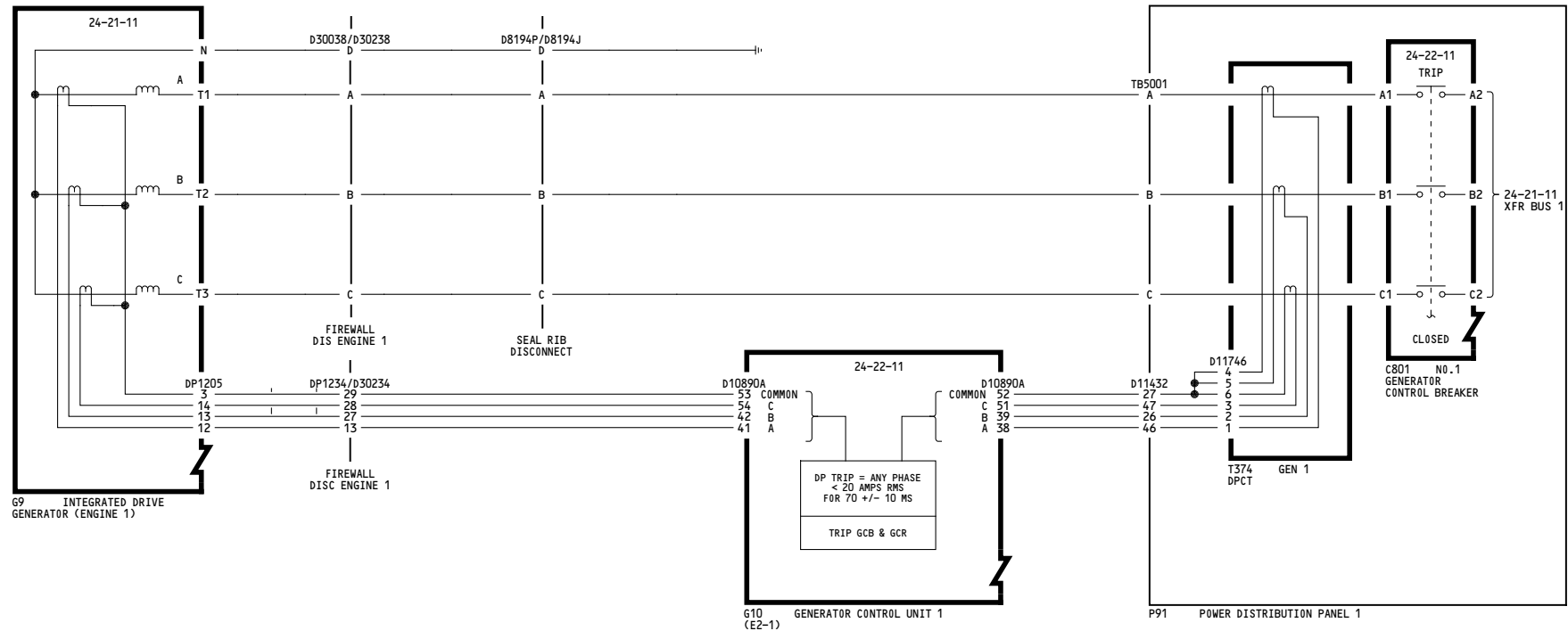
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DIFFERENTIAL CURRENT  
PROTECTION GEN NO.1

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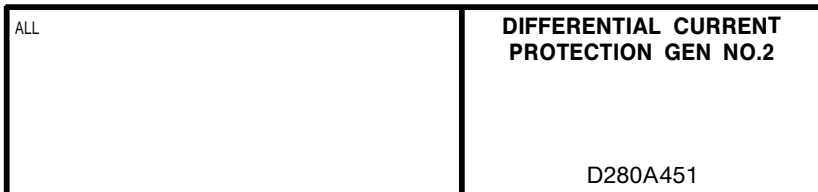
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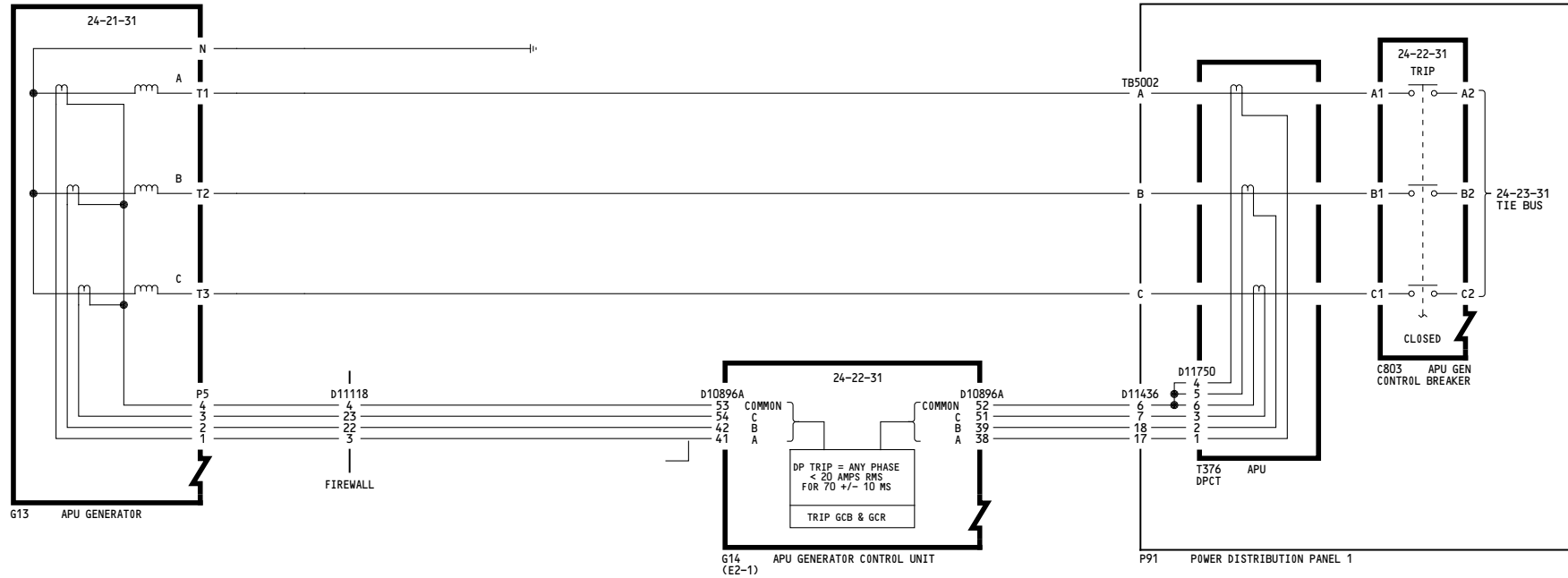
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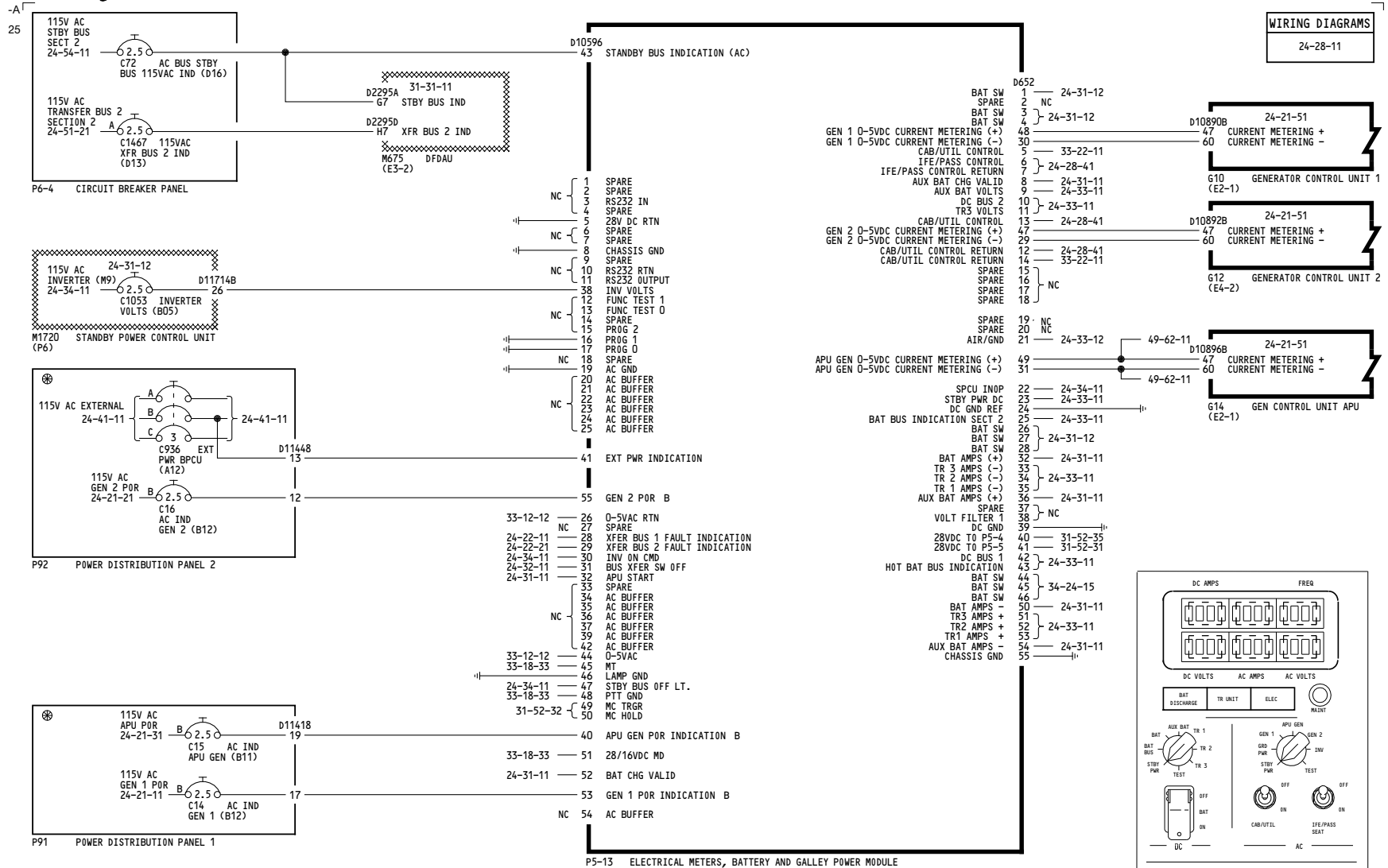
DIFFERENTIAL CURRENT  
PROTECTION APU GEN

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AC INDICATION P5-13

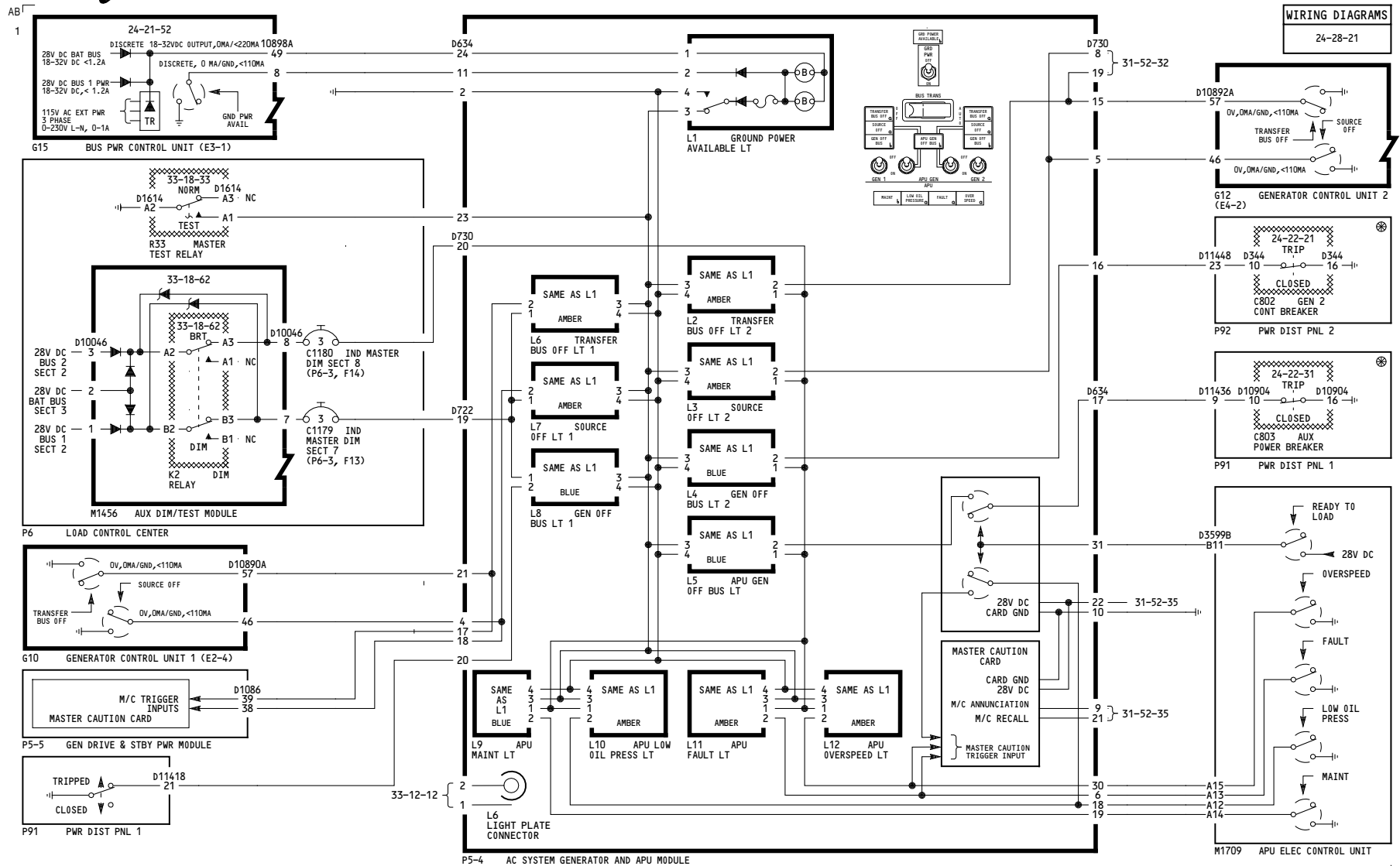
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P5-13 FACEPLATE

**24-28-11**

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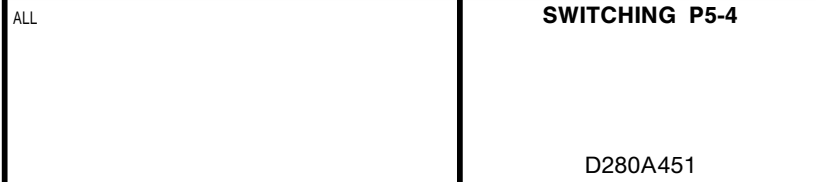
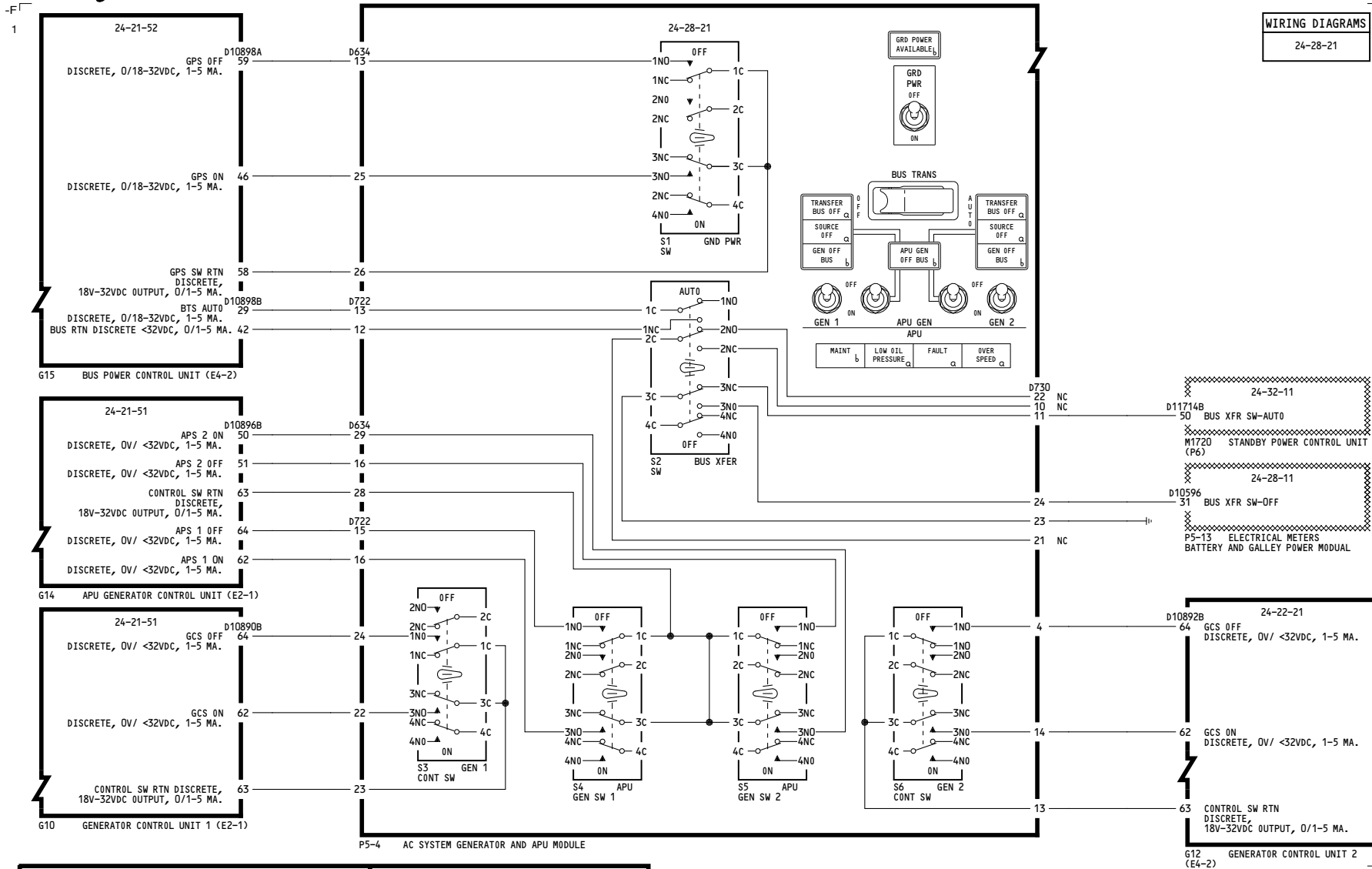
## AC SYSTEM GENERATOR & APU INDICATION P5-4

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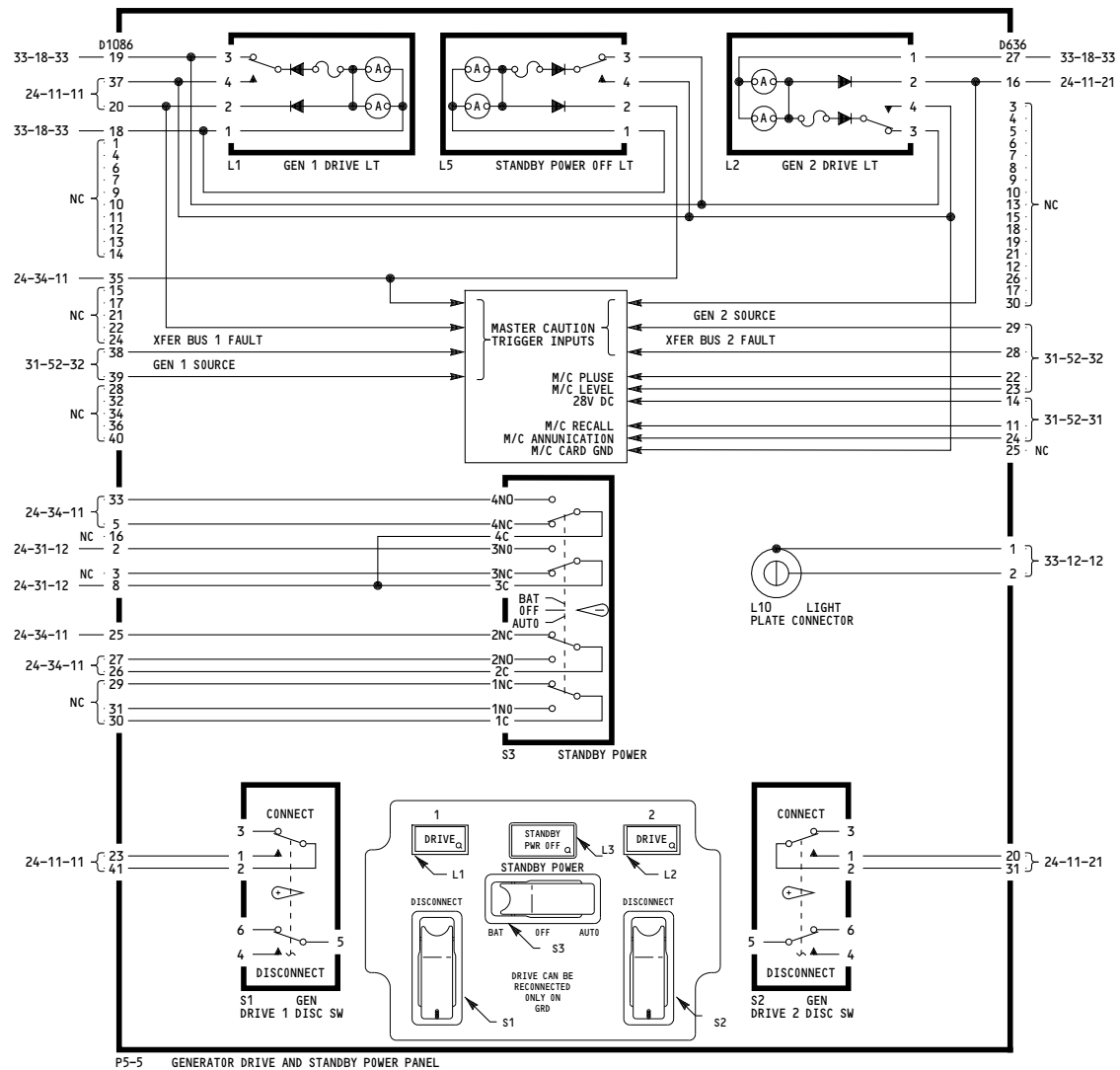
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24-28-31



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**GENERATOR DRIVE & STANDBY  
POWER SWITCHING INDICATIO  
N P5-5**

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**24-28-31**

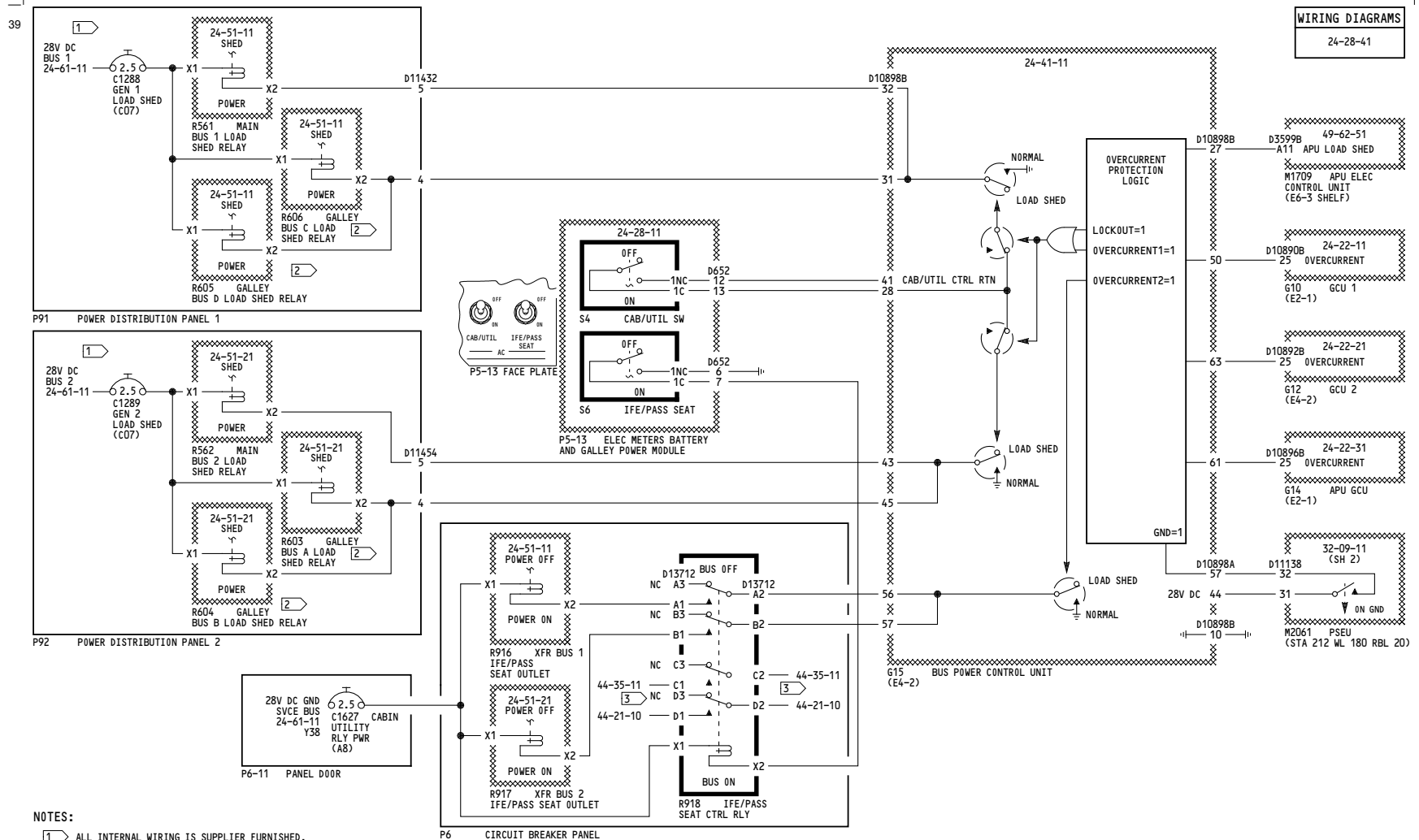
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## WIRING DIAGRAMS

### 24-28-41



- NOTES:
- 1 ALL INTERNAL WIRING IS SUPPLIER FURNISHED.
  - 2 IF INSTALLED
  - 3 AUDIO OR VIDEO DC CIRCUIT BREAKER IF INSTALLED

YT101-YT120

## AUTOMATIC LOAD SHED GALLEYS & MAIN BUSES

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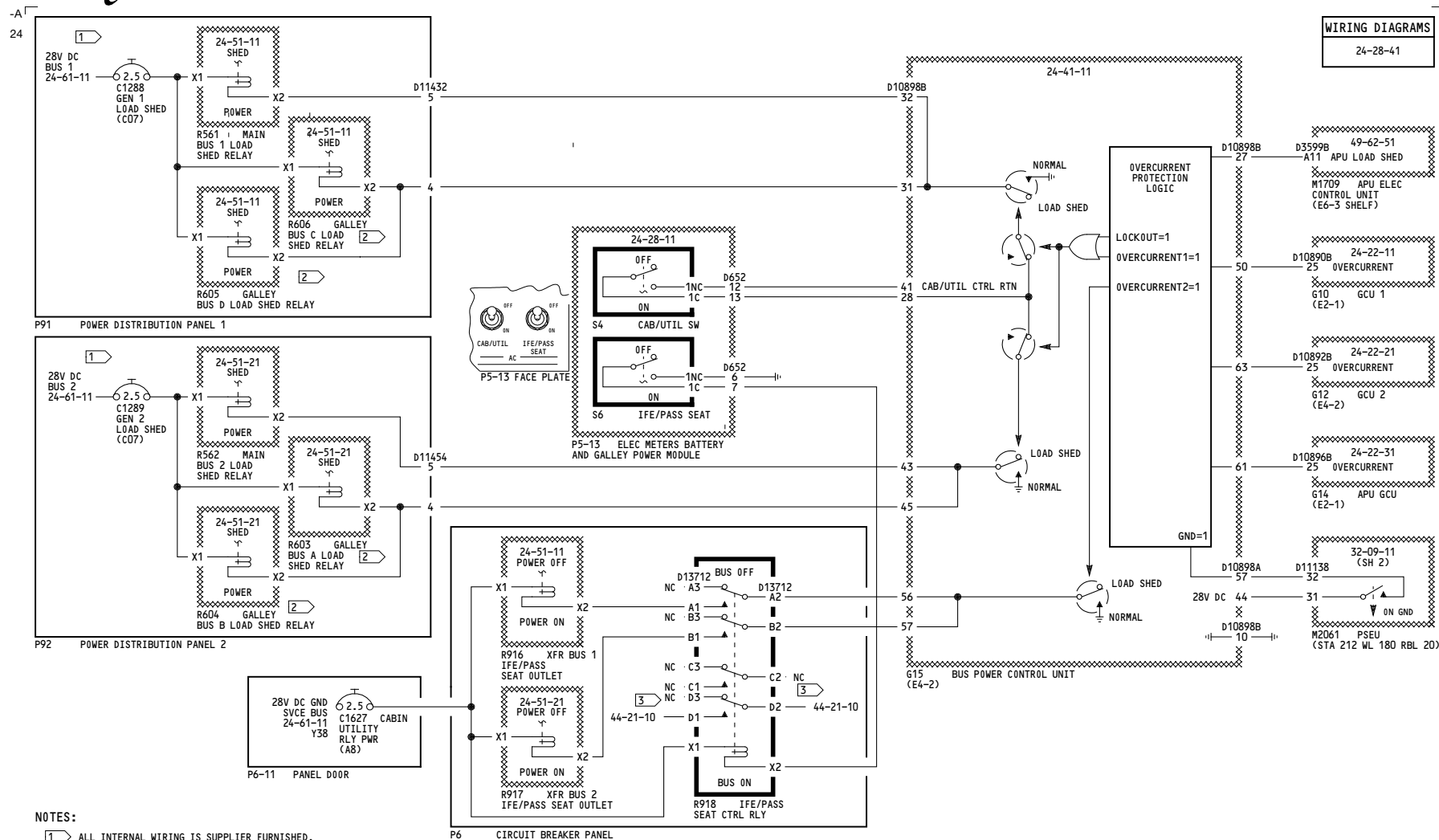
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## WIRING DIAGRAMS

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YT126-YT133

## AUTOMATIC LOAD SHED GALLEYS & MAIN BUSES

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24-31-11 24-31-12



2 RESISTANCE MEASUREMENT OF THE LUG ON THE 20 GAUGE WIRE FROM THE PIN 32 OF D652 AT THAT DESIGNATED GROUND IS NOT REQUIRED.

P5-13 ELECTRICAL METERS, BATTERY AND GALLEY POWER MODULE

## BATTERY AND BATTERY CHARGER

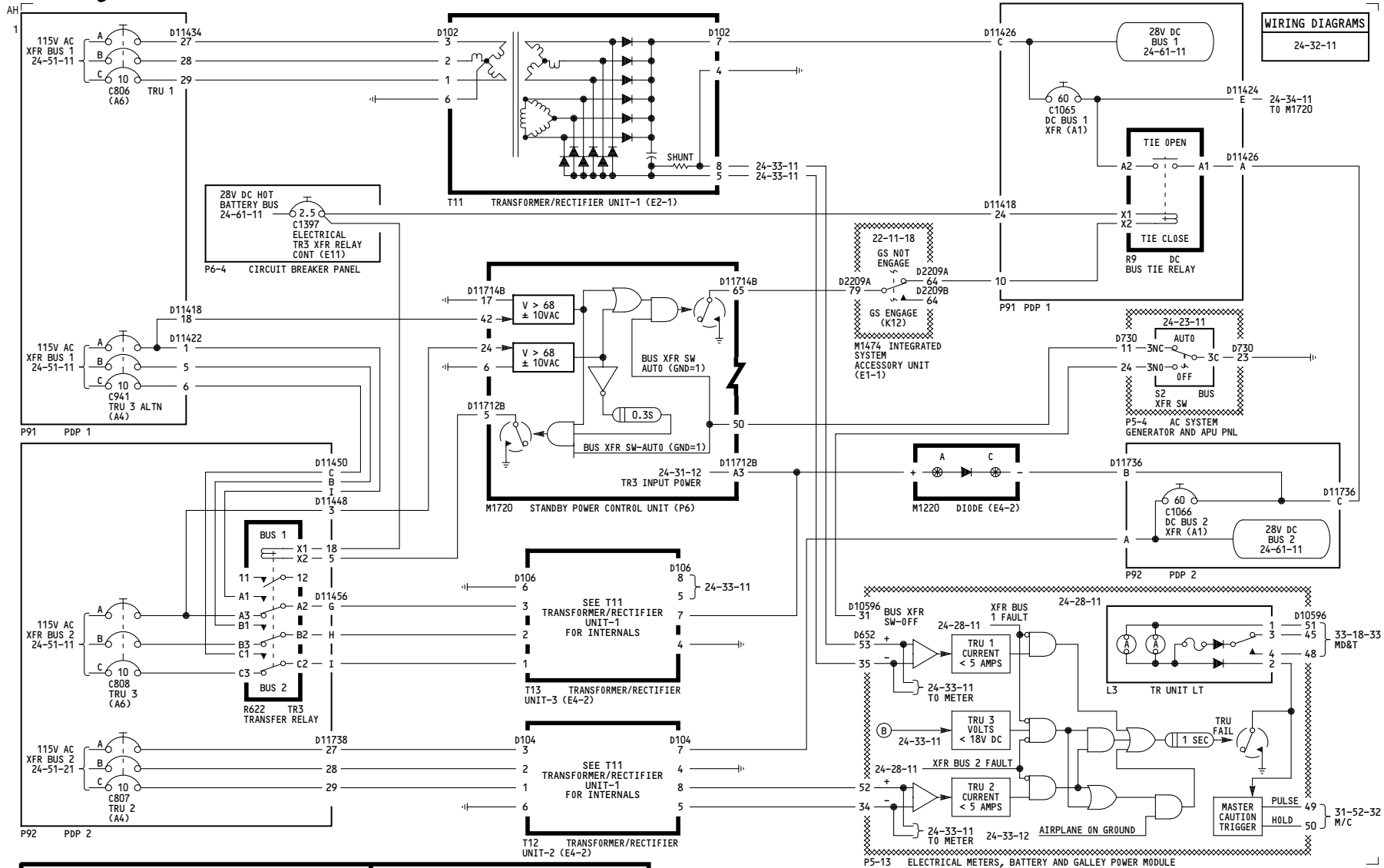
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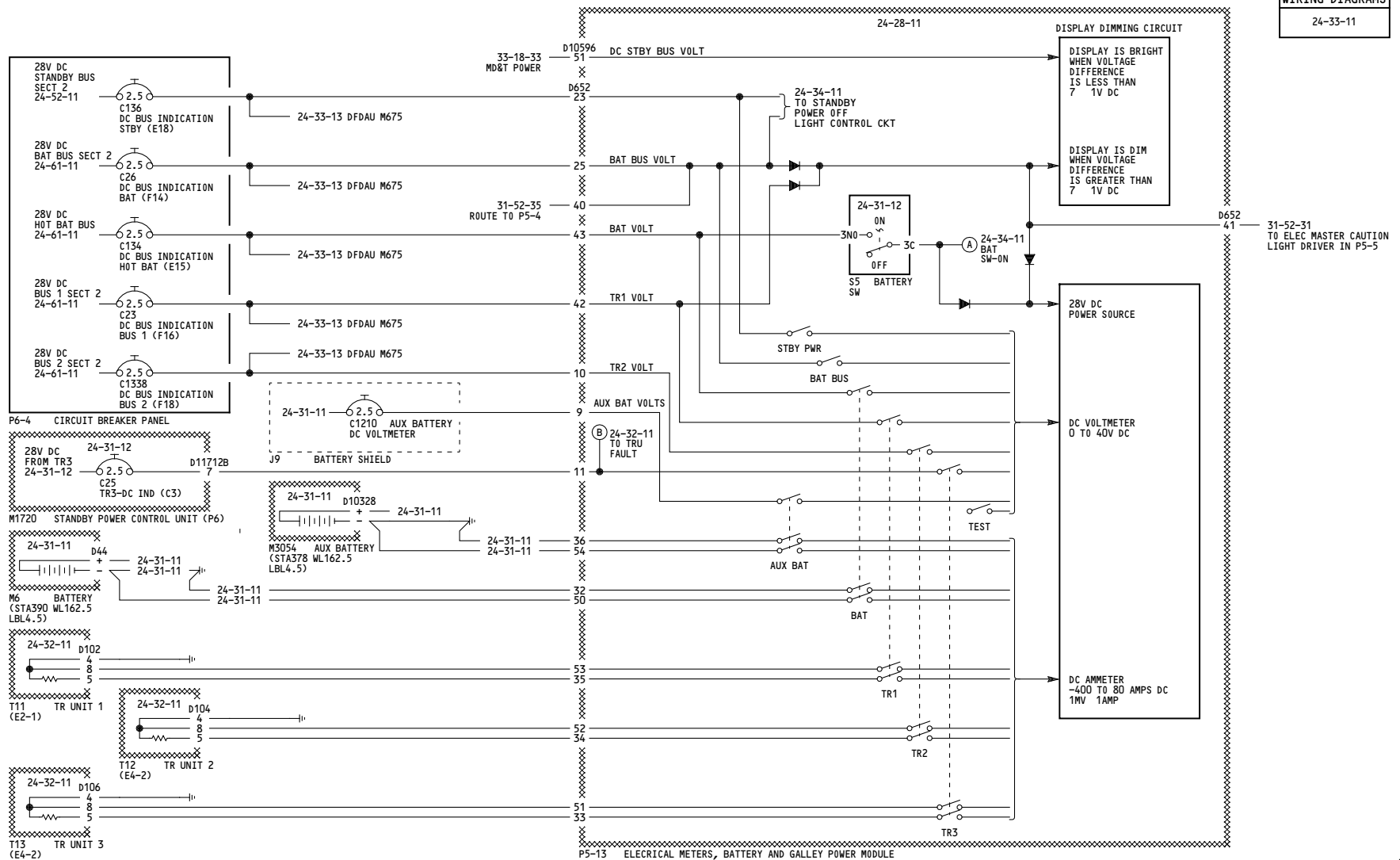


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WIRING DIAGRAMS  
24-33-11



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## DC VOLTAGE AND CURRENT INDICATIONS

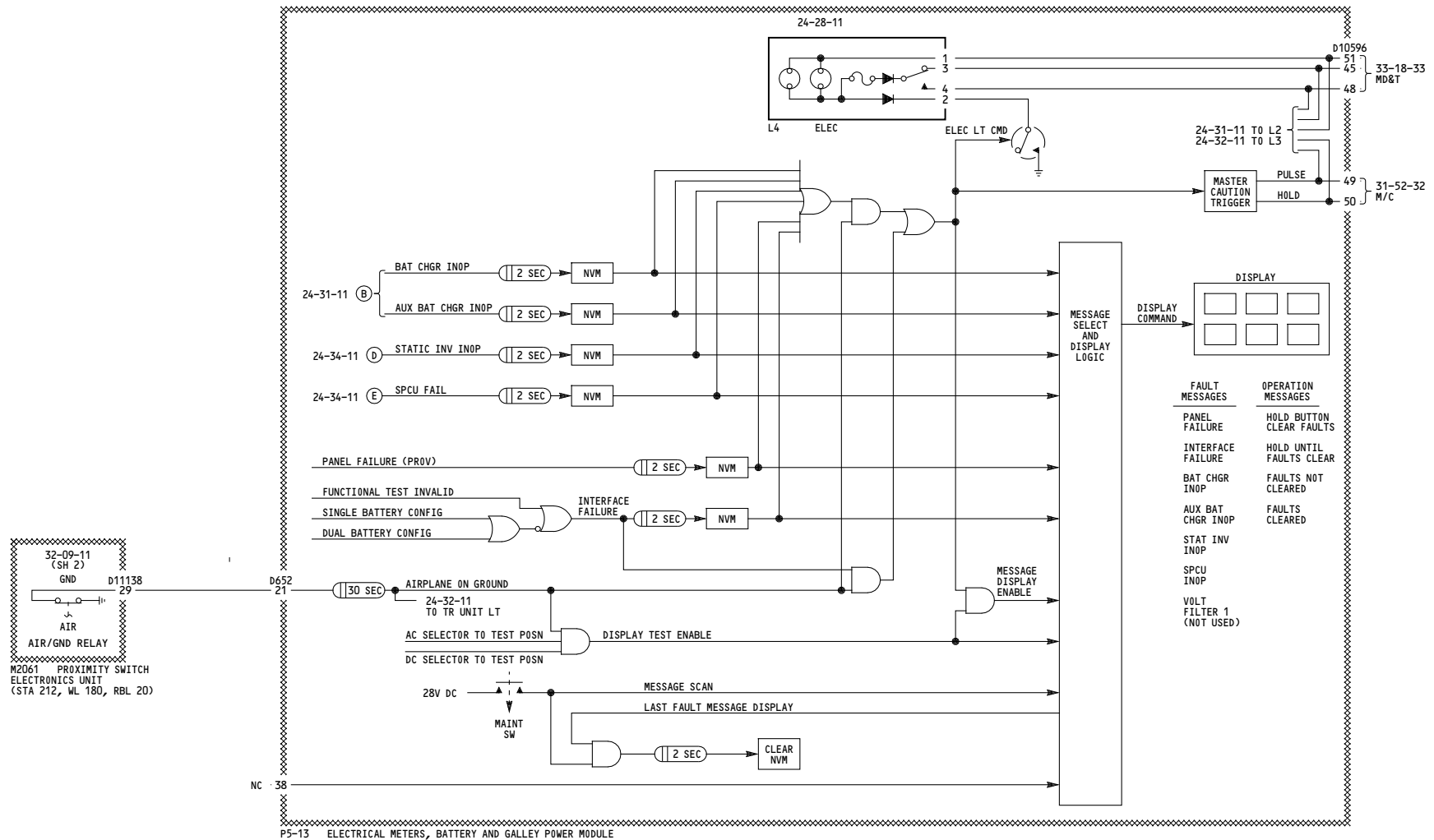
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**ELEC LIGHT AND ALPHANUMERIC DISPLAY**

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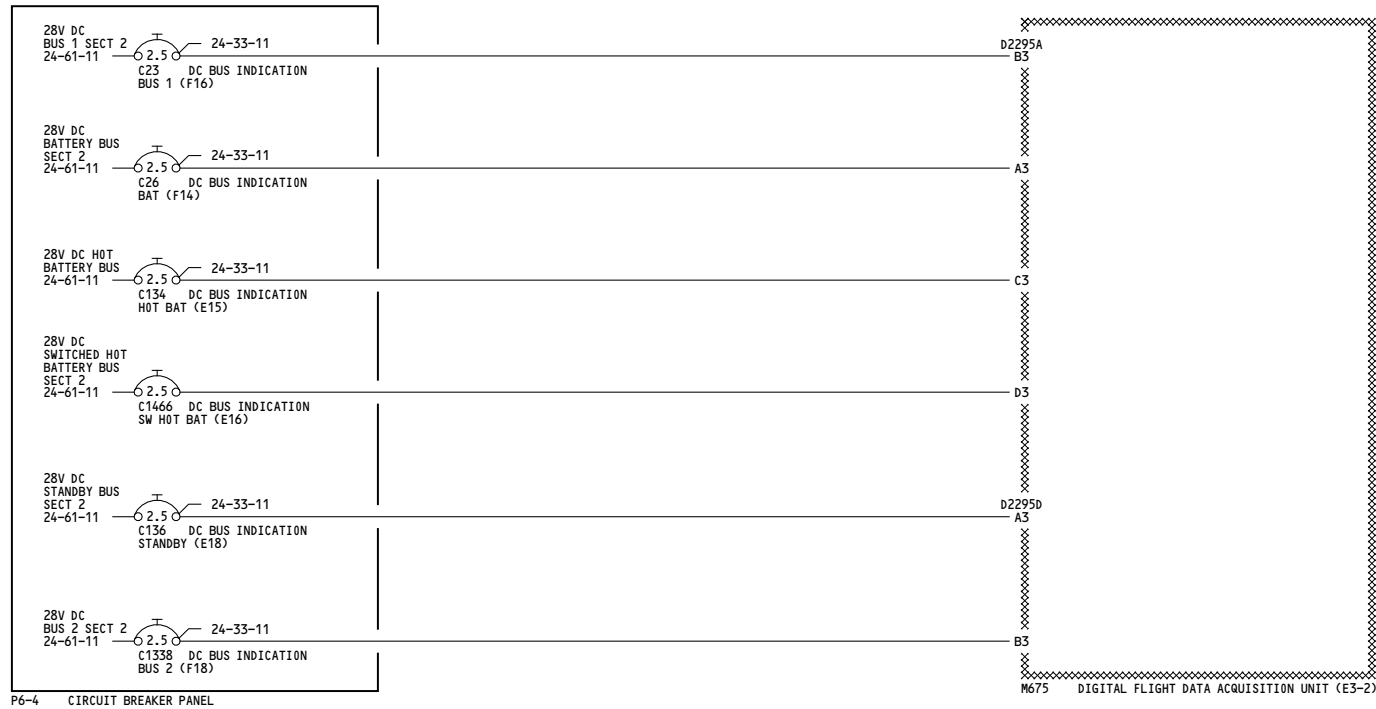
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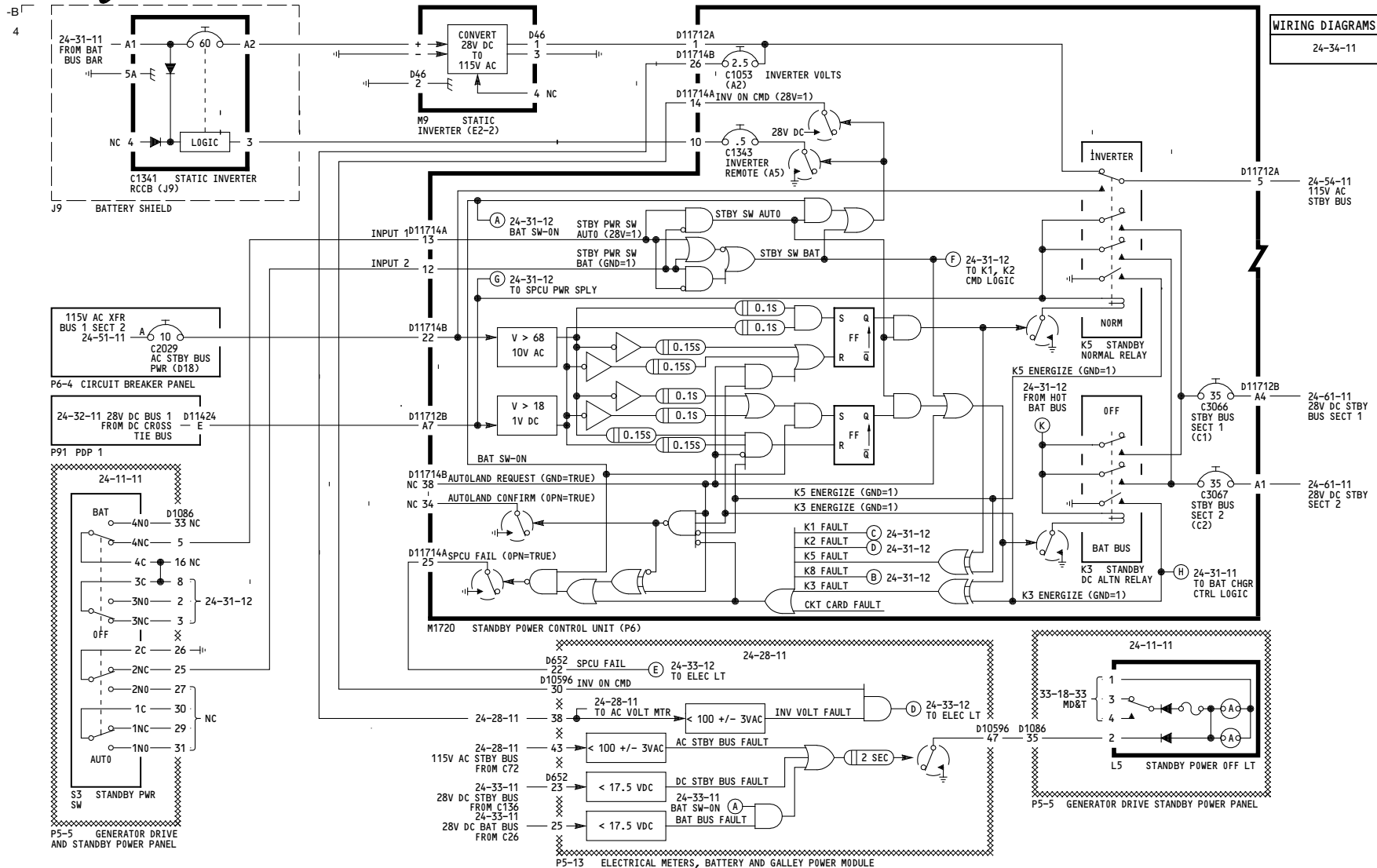
ALL	DC BUS INDICATION DFDAU
	D280A451

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ALL

## STANDBY POWER

**24-34-11**

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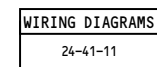
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## ALL

## D280A451



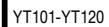
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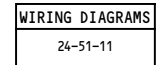


WIRING DIAGRAMS
24-51-11

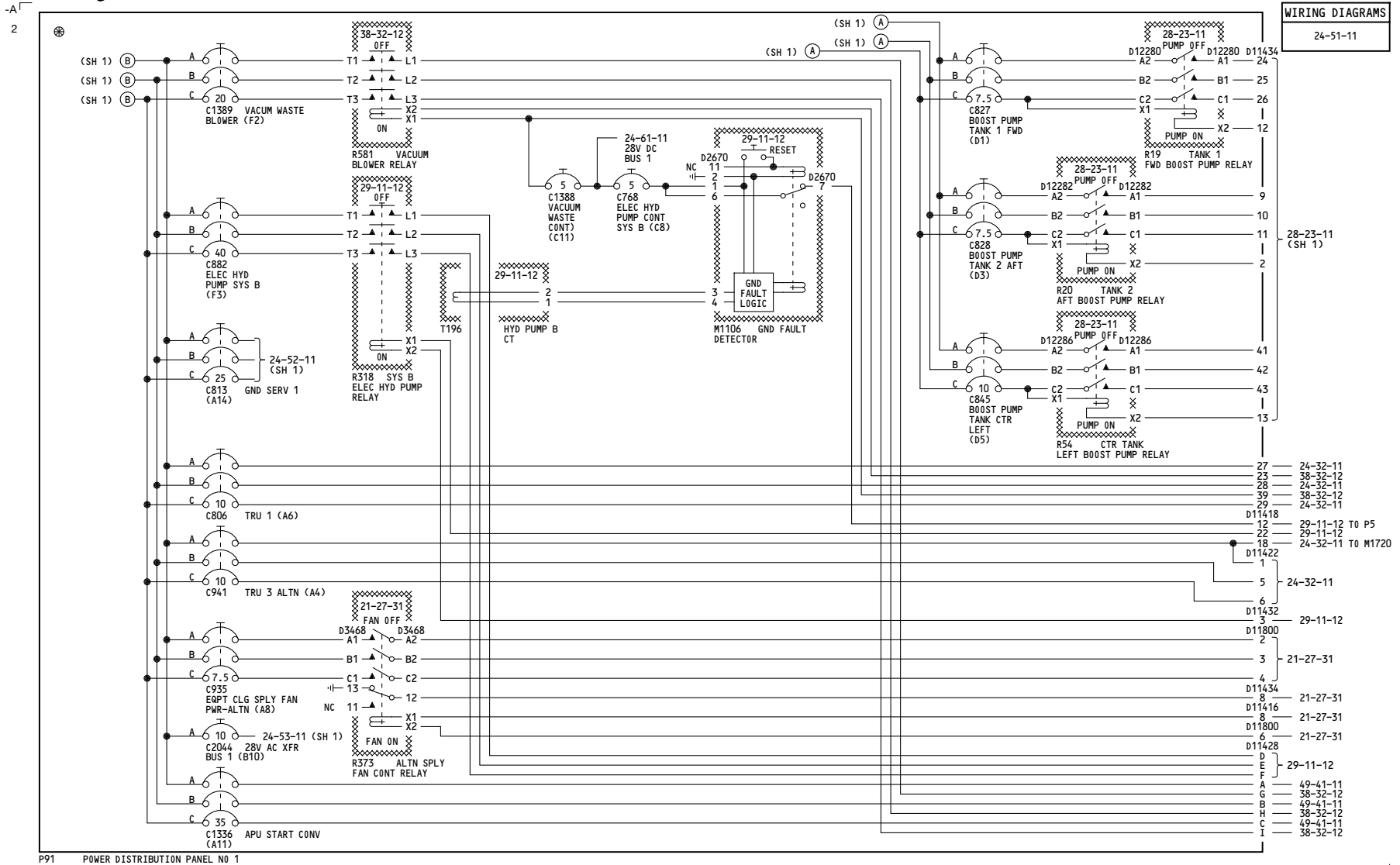


**24-51-11**

D280A451



**24-51-11**



YT126-YT133

115V AC TRANSFER BUS 1

D280A451

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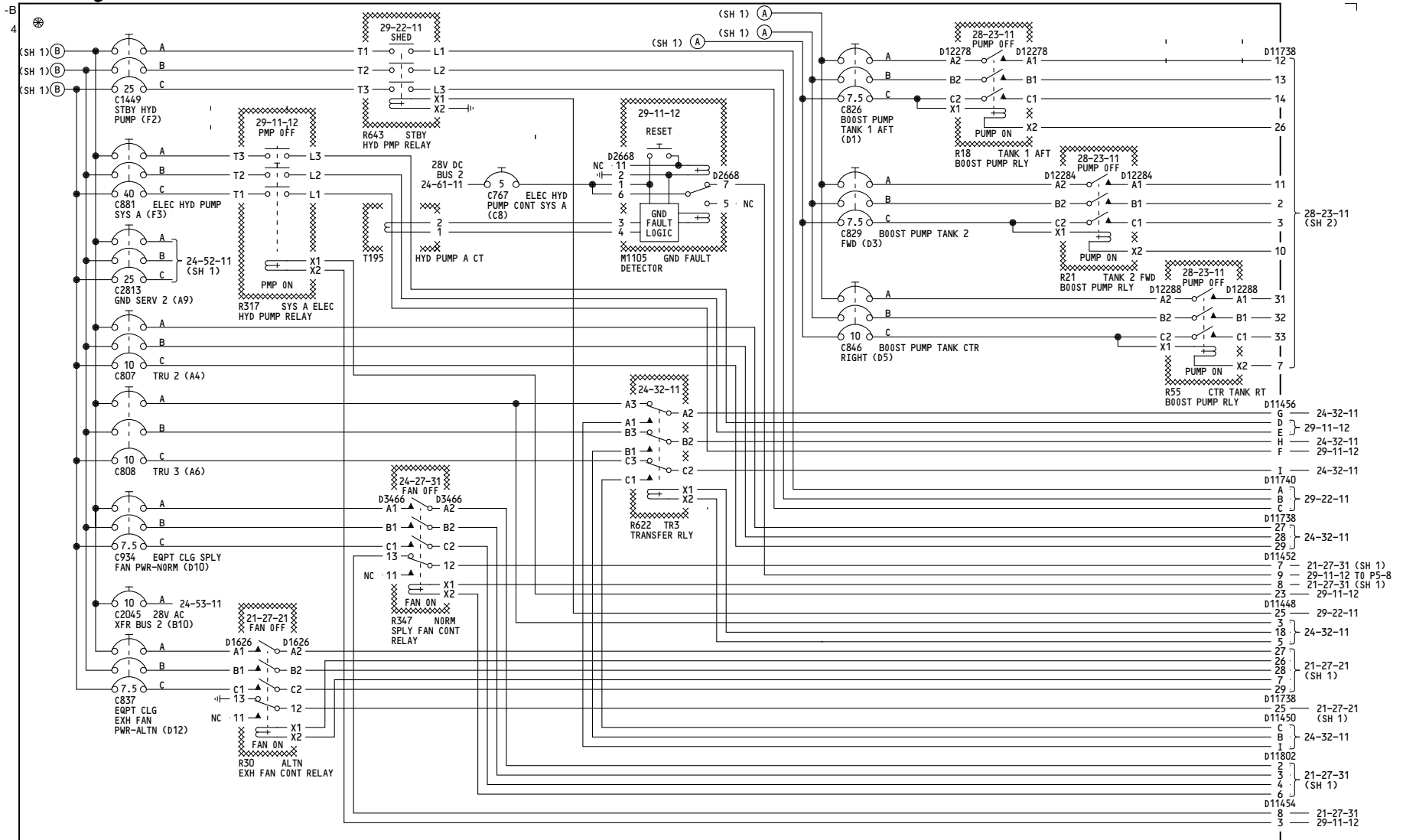
P6 CIRCUIT BREAKER PANEL

115V AC TRANSFER BUS 2

**24-51-21**

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Sheet 1  
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P92 POWER DISTRIBUTION PANEL NO 2

YT101-YT120

115V AC TRANSFER BUS 2

D280A451

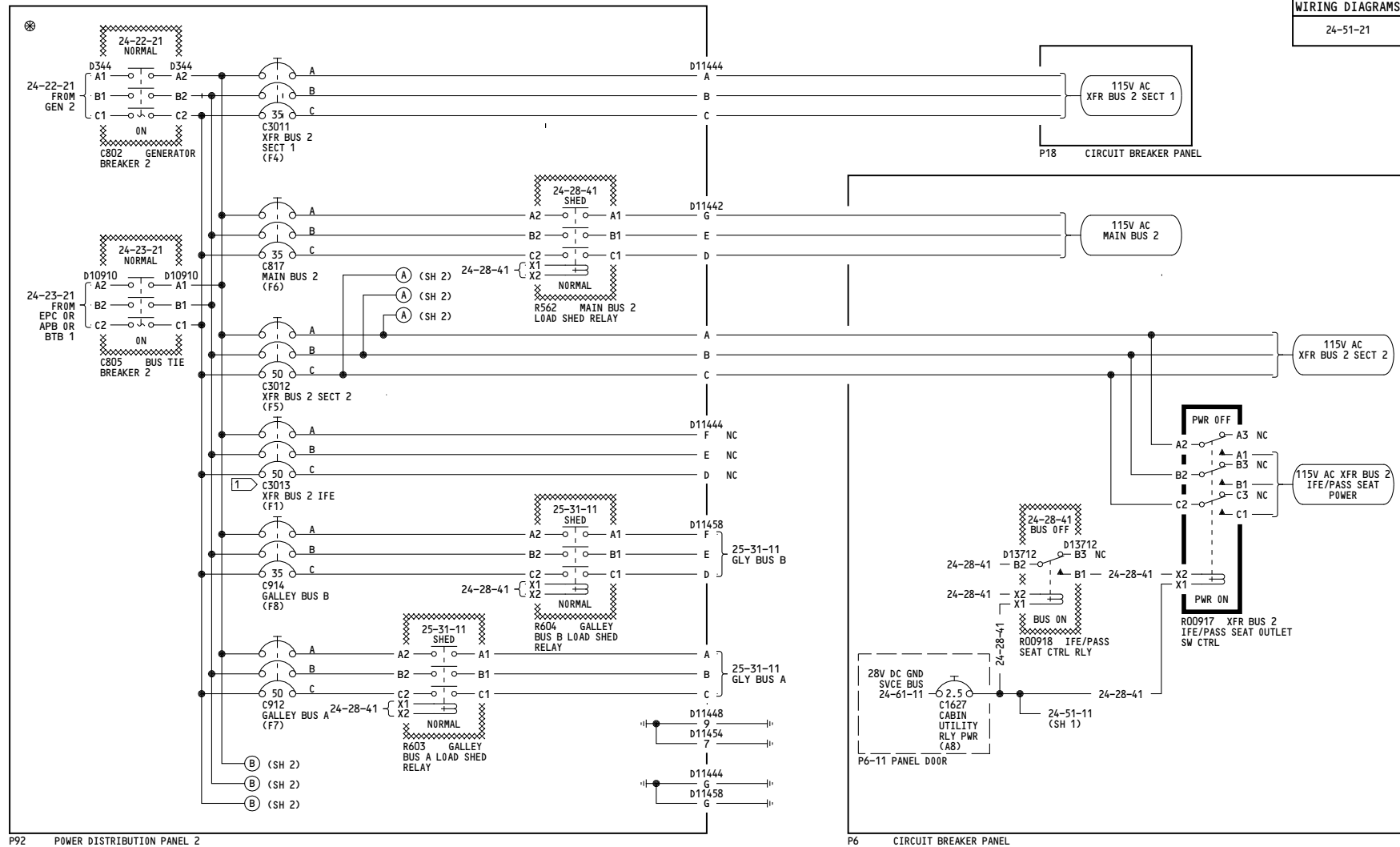
24-51-21

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Sheet 2  
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## WIRING DIAGRAMS

24-51-21



NOTES:

1 COLLAR & LABEL INOP

YT126-YT133

115V AC TRANSFER BUS 2

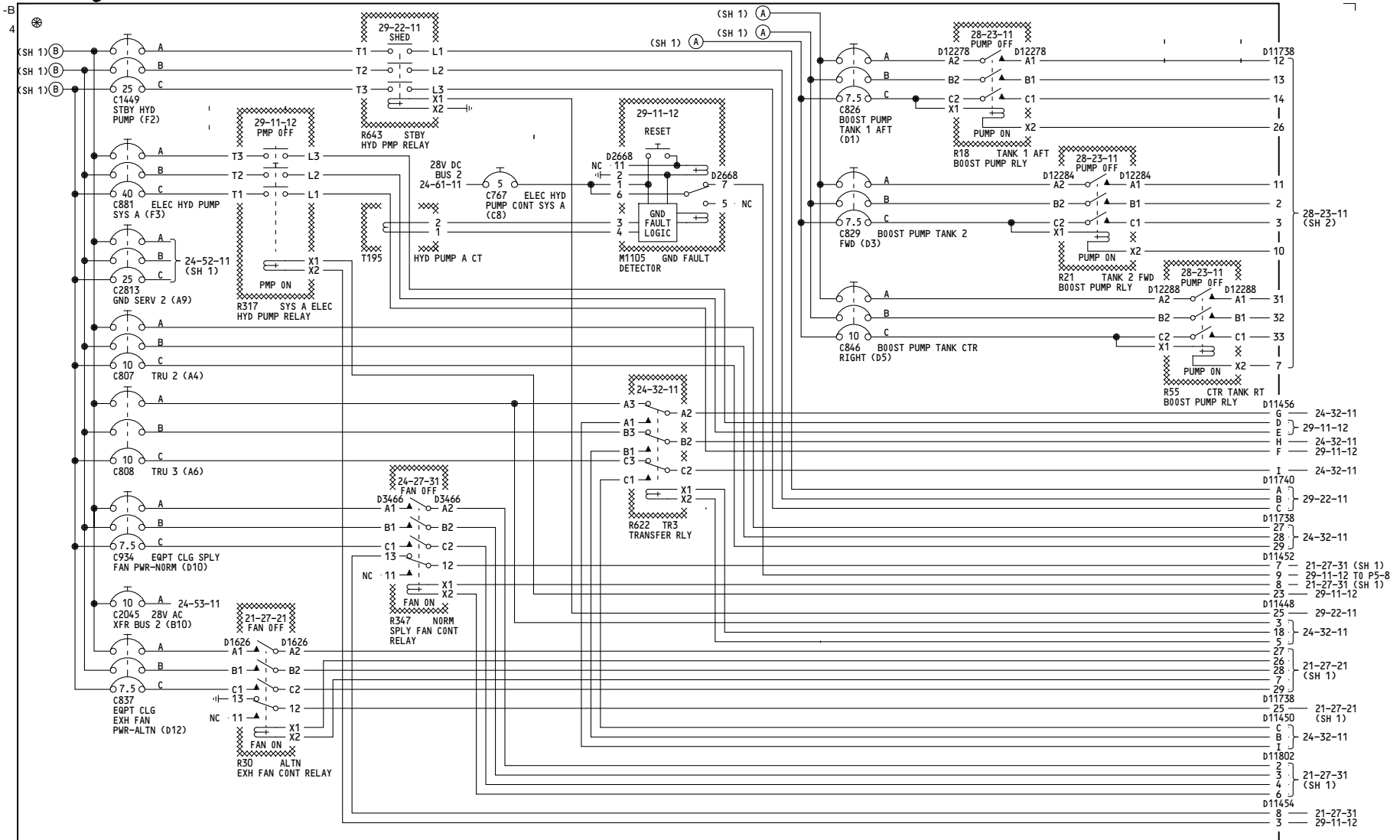
**24-51-21**

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Sheet 1

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P92 POWER DISTRIBUTION PANEL NO 2

YT126-YT133

115V AC TRANSFER BUS 2

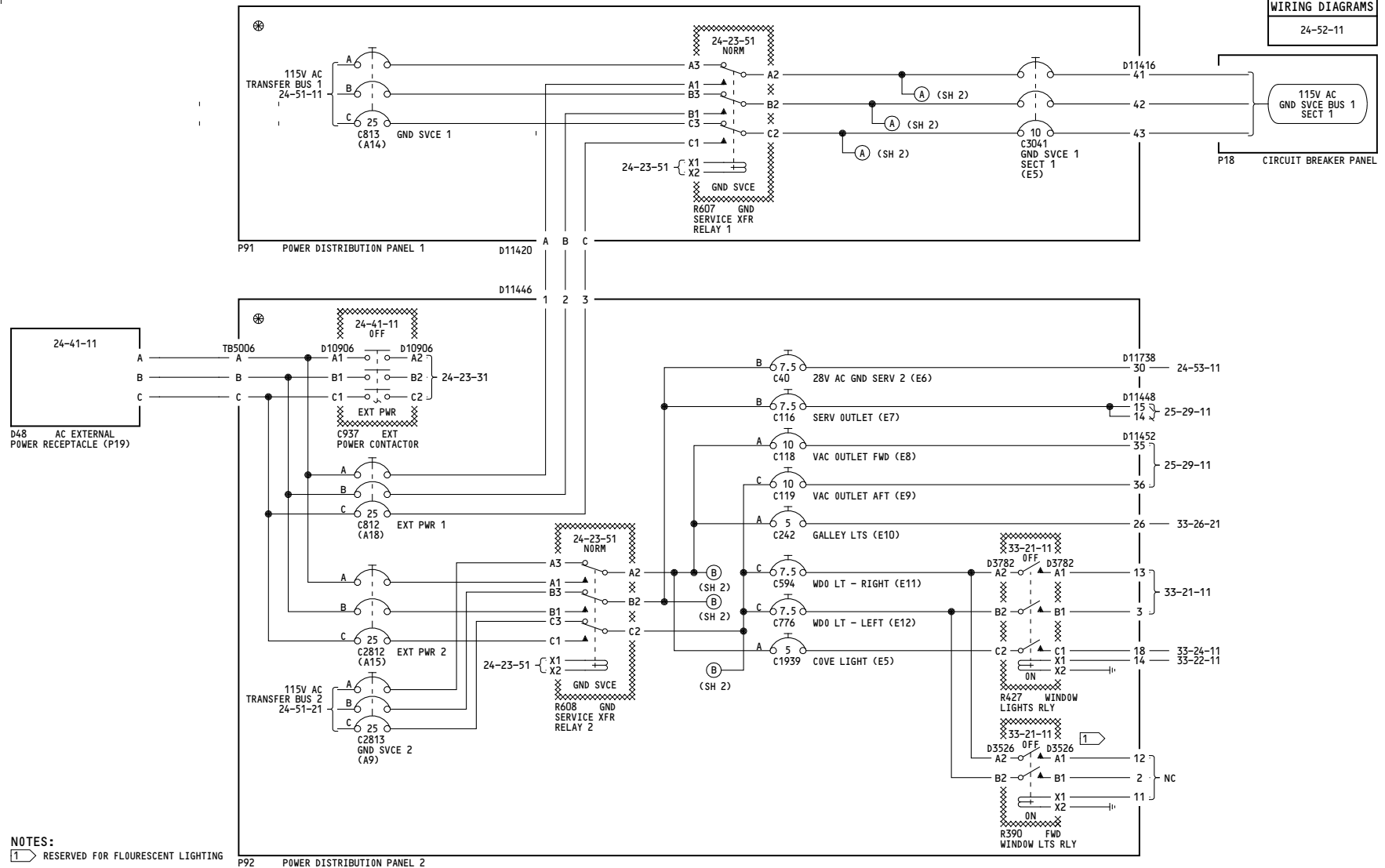
D280A451

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WIRING DIAGRAMS  
24-52-11

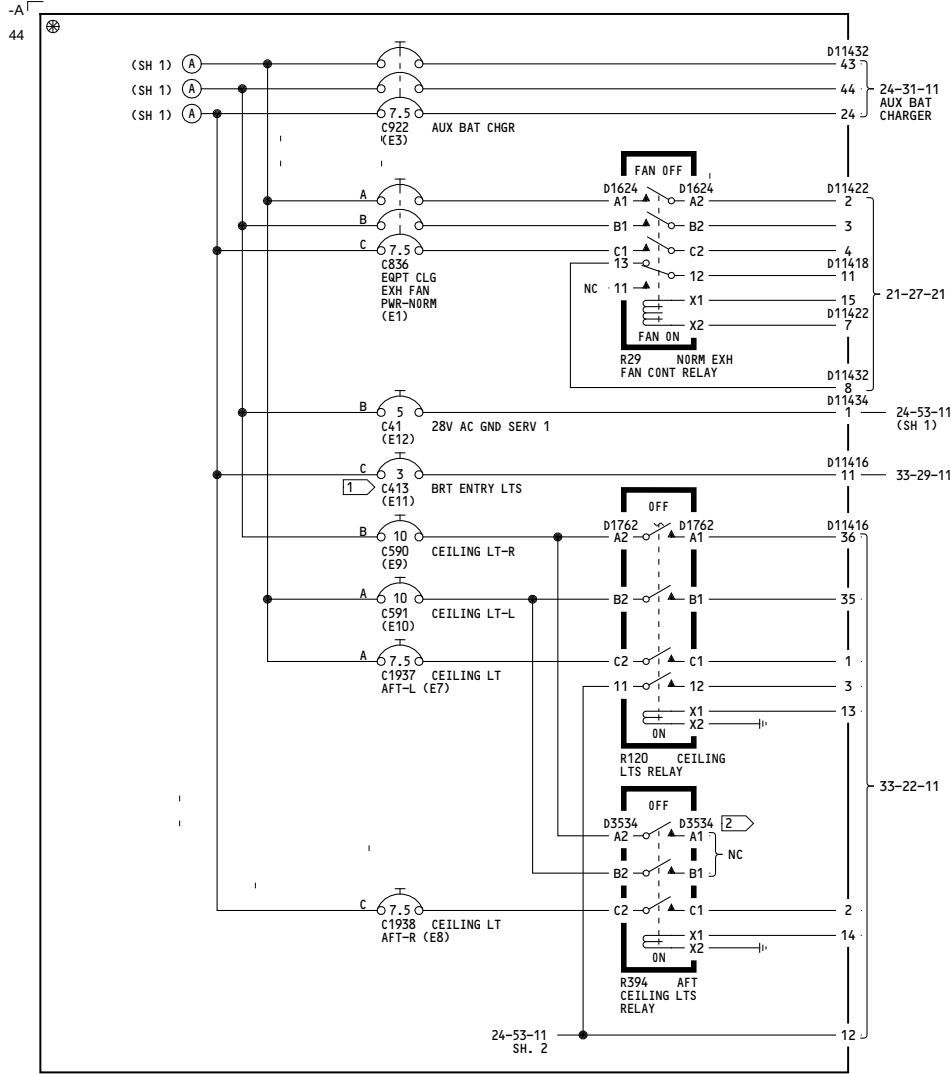


ALL	115V AC GROUND SERVICE BUS
	D280A451

**24-52-11**



## 737-800 SYSTEM SCHEMATIC MANUAL

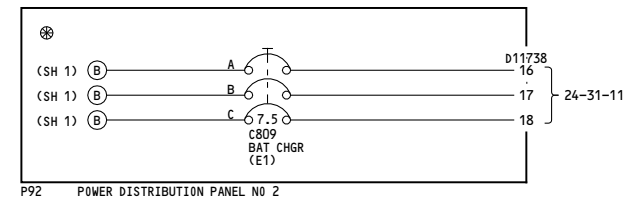


NOTES: 1 COLLAR AND LABEL INOP 2 RESERVED FOR FLOURESCENT LIGHTING

ALL

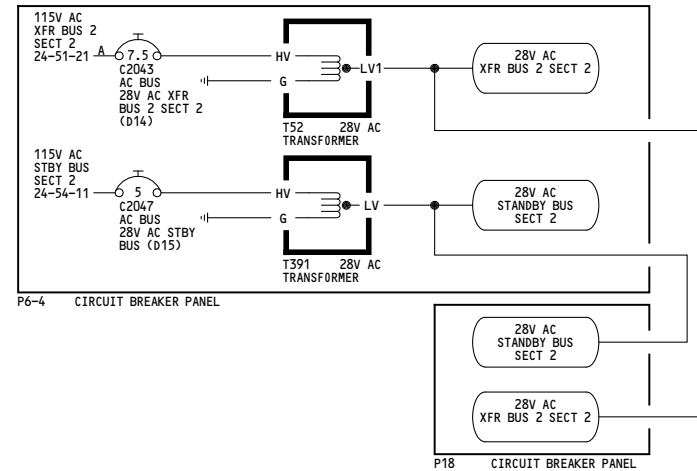
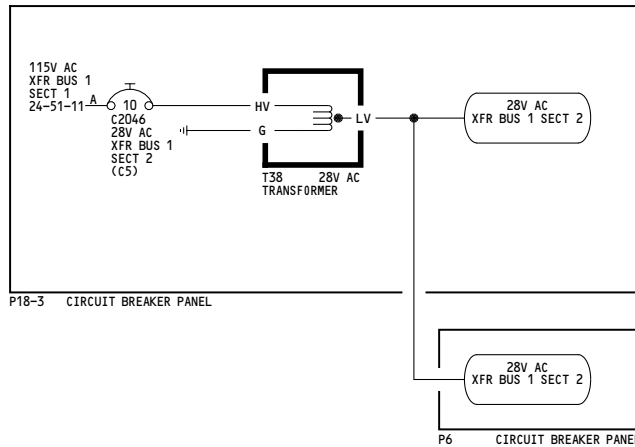
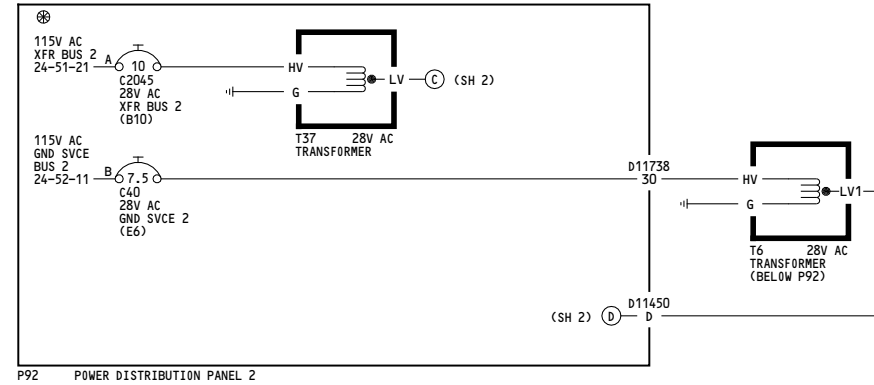
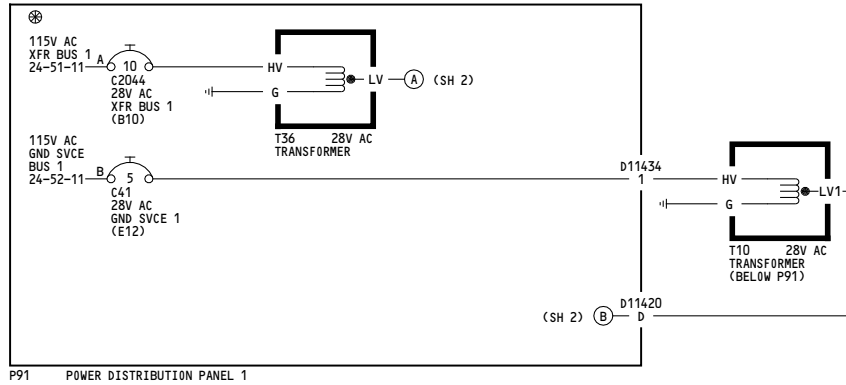
115V AC GROUND  
SERVICE BUS

D280A451



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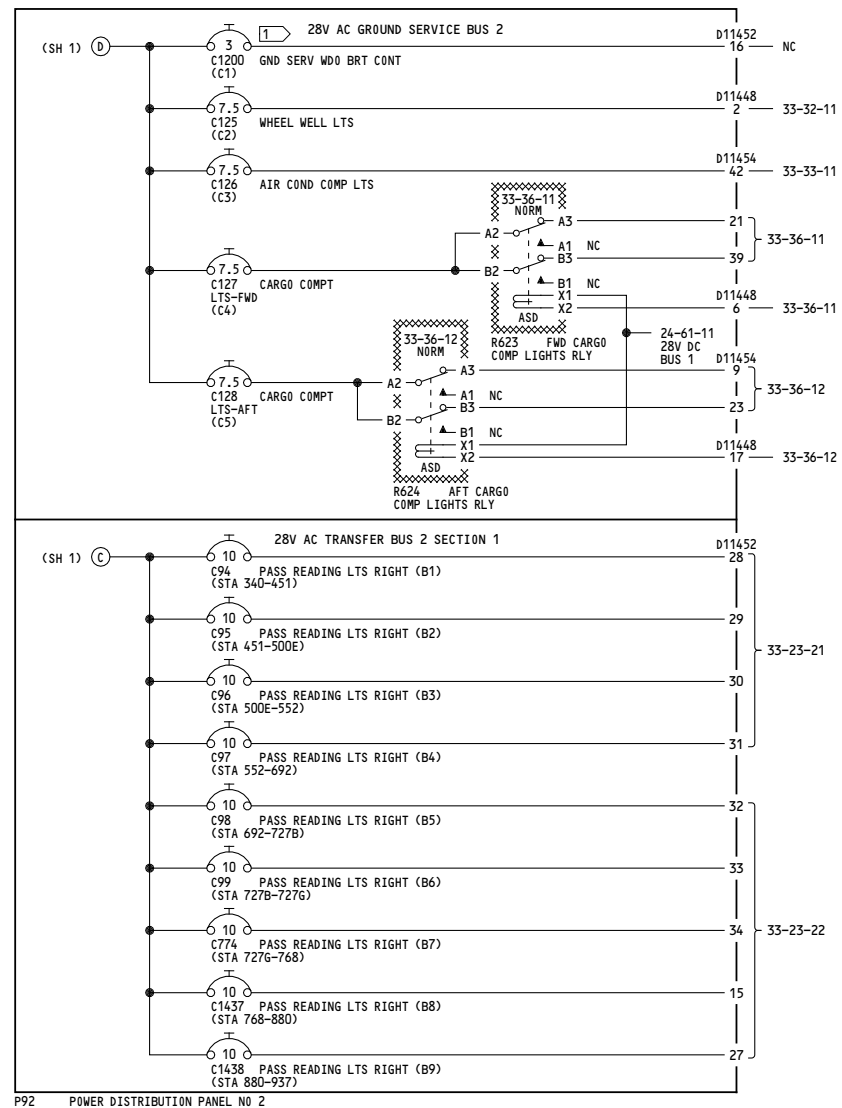
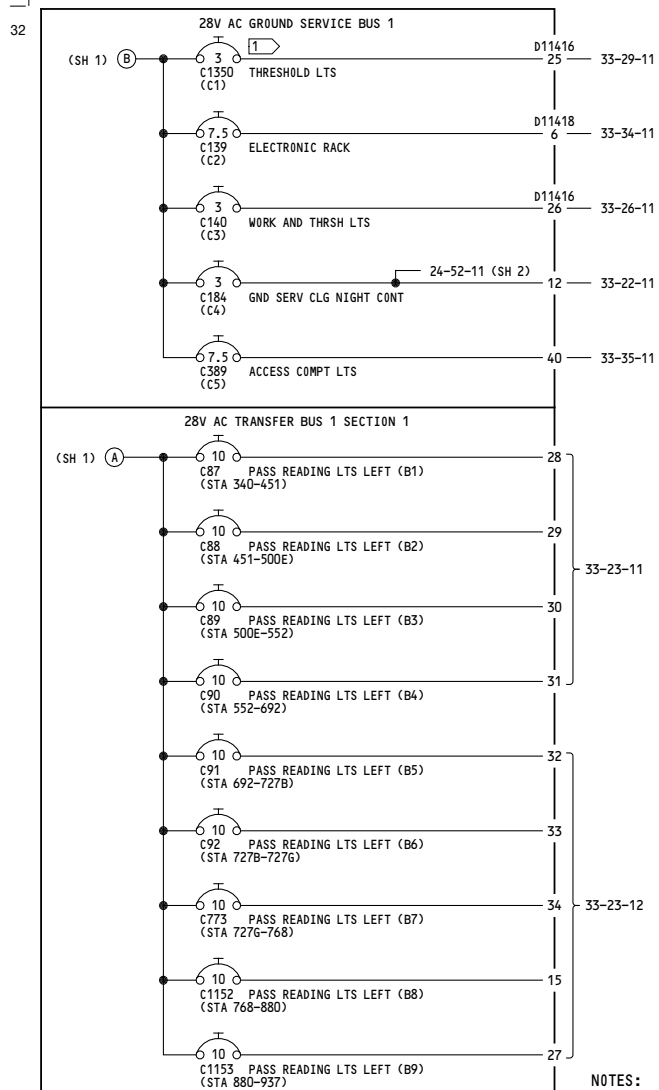


ALL	28V AC BUSES
	D280A451

**24-53-11**



## 737-800 SYSTEM SCHEMATIC MANUAL



ALL

28V AC BUSES

D280A451

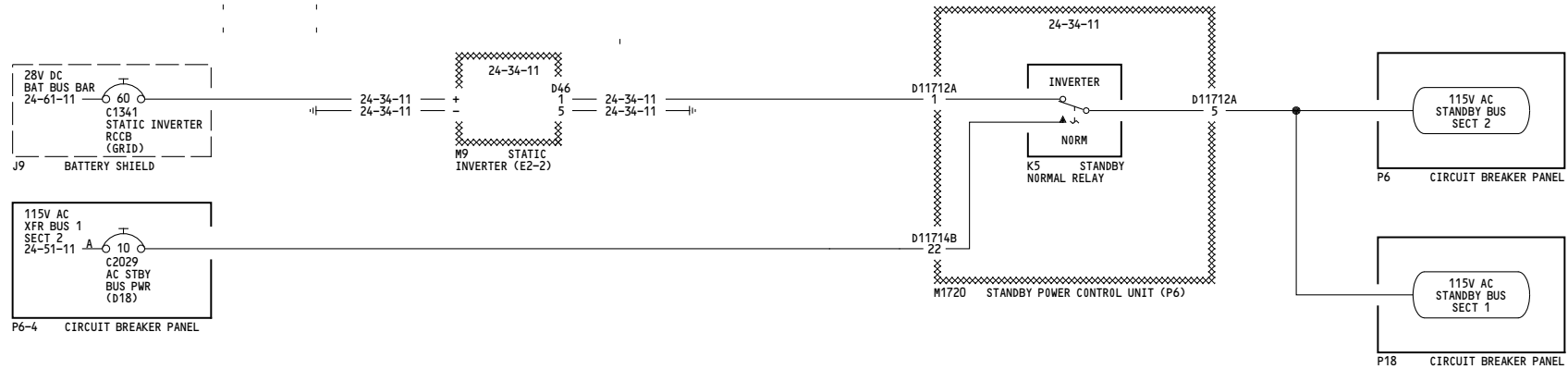
24-53-11

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WIRING DIAGRAMS  
24-54-11



ALL	115V AC STANDBY BUS
	D280A451

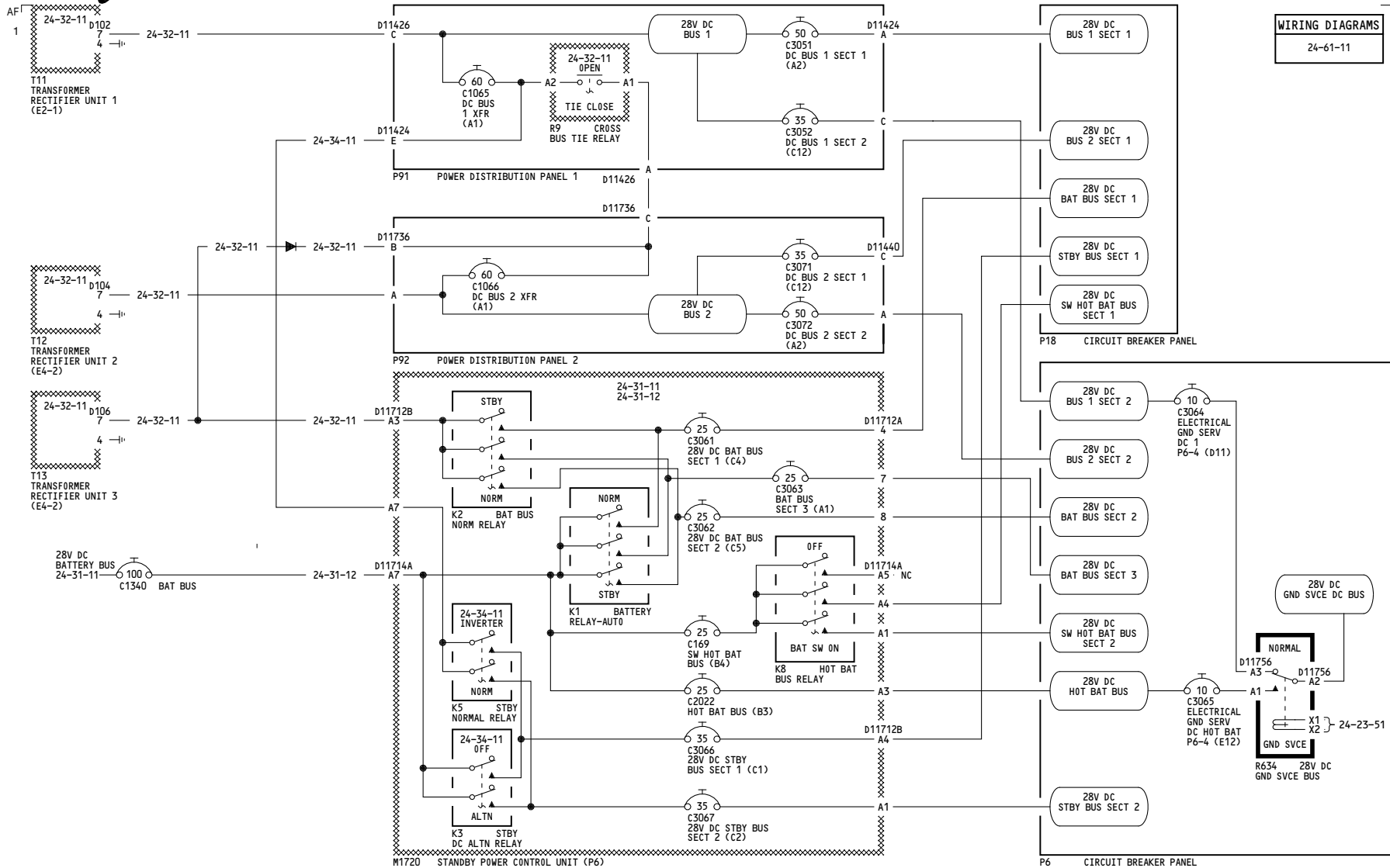
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## 737-800 SYSTEM SCHEMATIC MANUAL



ALL

## 28V DC BUSES

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