

**CHAPTER**

**30**

**ICE AND RAIN PROTECTION**



CHAPTER 30  
ICE AND RAIN PROTECTION

CH-SC-SU	Schem	Page	Sheet	Date	CH-SC-SU	Schem	Page	Sheet	Date
30-EFFECTIVE PAGES					30-32-02				
		1 thru 2		May 06/2009	R		101		May 06/2009
30-CONTENTS					30-33-01				
R		1		May 06/2009	R		101		May 06/2009
R		2		May 06/2009	30-34-01				
30-ALPHABETICAL INDEX					R		101		May 06/2009
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		2		BLANK	R		101		May 06/2009
30-11-01					30-41-02				
R		101		May 06/2009	R		101		May 06/2009
30-21-01					30-41-03				
R		101		May 06/2009	R		101		May 06/2009
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R		101.1		May 06/2009	30-43-01				
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R		101		May 06/2009	R		101.1		May 06/2009

A = Added, R = Revised, D = Deleted, O = Overflow

**30-EFFECTIVE PAGES**



CHAPTER 30  
ICE AND RAIN PROTECTION

CH-SC-SU	Schem	Page	Sheet	Date	CH-SC-SU	Schem	Page	Sheet	Date
30-71-01		101		Jan 21/2005					
		102		Dec 18/2007					
D		103		May 06/2009					
A		102.1		May 06/2009					

A = Added, R = Revised, D = Deleted, O = Overflow

**30-EFFECTIVE PAGES**

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May 06/2009

D280N032S

CHAPTER 30  
ICE AND RAIN PROTECTION

Title	CH-SC-SU	Schem	Page	Sheet	Date	Effectivity
<b><u>WING THERMAL ANTI-ICING</u></b>						
WING THERMAL ANTI-ICE	30-11-01		101		May 06/2009	ALL
<b><u>ENGINE INLET THERMAL ANTI-ICING</u></b>						
LEFT ENGINE COWL ANTI-ICE	30-21-01		101		May 06/2009	001-003
			102		Jan 21/2005	004-099
RIGHT ENGINE COWL ANTI-ICE	30-21-02		101		May 06/2009	001-003
			102		Dec 18/2007	004-099
<b><u>PITOT PROBE ANTI-ICING</u></b>						
LEFT PITOT PROBE HEAT	30-31-01		101		May 06/2009	ALL
RIGHT PITOT PROBE HEAT	30-31-02		101		May 06/2009	ALL
			101.1		May 06/2009	001-011
<b><u>ANGLE-OF-ATTACK PROBE HEAT</u></b>						
LEFT ANGLE OF ATTACK PROBE HEAT	30-32-01		101		May 06/2009	ALL
RIGHT ANGLE OF ATTACK PROBE HEAT	30-32-02		101		May 06/2009	ALL
<b><u>TOTAL AIR TEMPERATURE PROBE HEAT</u></b>						
RIGHT TOTAL AIR TEMPERATURE PROBE HEAT	30-33-01		101		May 06/2009	ALL
<b><u>ENGINE PROBE HEAT</u></b>						
ENGINE PROBE HEAT	30-34-01		101		May 06/2009	ALL
<b><u>FLIGHT COMPARTMENT WINDOW ANTI-ICING</u></b>						
LEFT FORWARD WINDOW 1 HEAT SYSTEM	30-41-01		101		May 06/2009	ALL
RIGHT FORWARD WINDOW 1 HEAT SYSTEM	30-41-02		101		May 06/2009	ALL
LEFT SLIDING WINDOW 2 HEAT SYSTEM	30-41-03		101		May 06/2009	ALL
RIGHT SLIDING WINDOW 2 HEAT SYSTEM	30-41-04		101		May 06/2009	ALL



CHAPTER 30  
ICE AND RAIN PROTECTION

Title	CH-SC-SU	Schem	Page	Sheet	Date	Effectivity
I LEFT SIDE WINDOW 3 HEAT SYSTEM	30-41-05		101		May 06/2009	ALL
I RIGHT SIDE WINDOW 3 HEAT SYSTEM	30-41-06		101		May 06/2009	ALL
<b><u>WINDSHIELD WIPER SYSTEM</u></b>						
I WINDSHIELD WIPERS	30-42-01		101		May 06/2009	ALL
<b><u>WINDSHIELD RAIN REPELLENT SYSTEM</u></b>						
I RAIN REPELLENT SYSTEM	30-43-01		101		May 06/2009	ALL
I			101.1		May 06/2009	001-011
<b><u>WATER AND DRAIN LINE HEATERS</u></b>						
WATER AND WASTE SYSTEM HEATERS	30-71-01		101		Jan 21/2005	001
			102		Dec 18/2007	002-099
I			102.1		May 06/2009	003-011

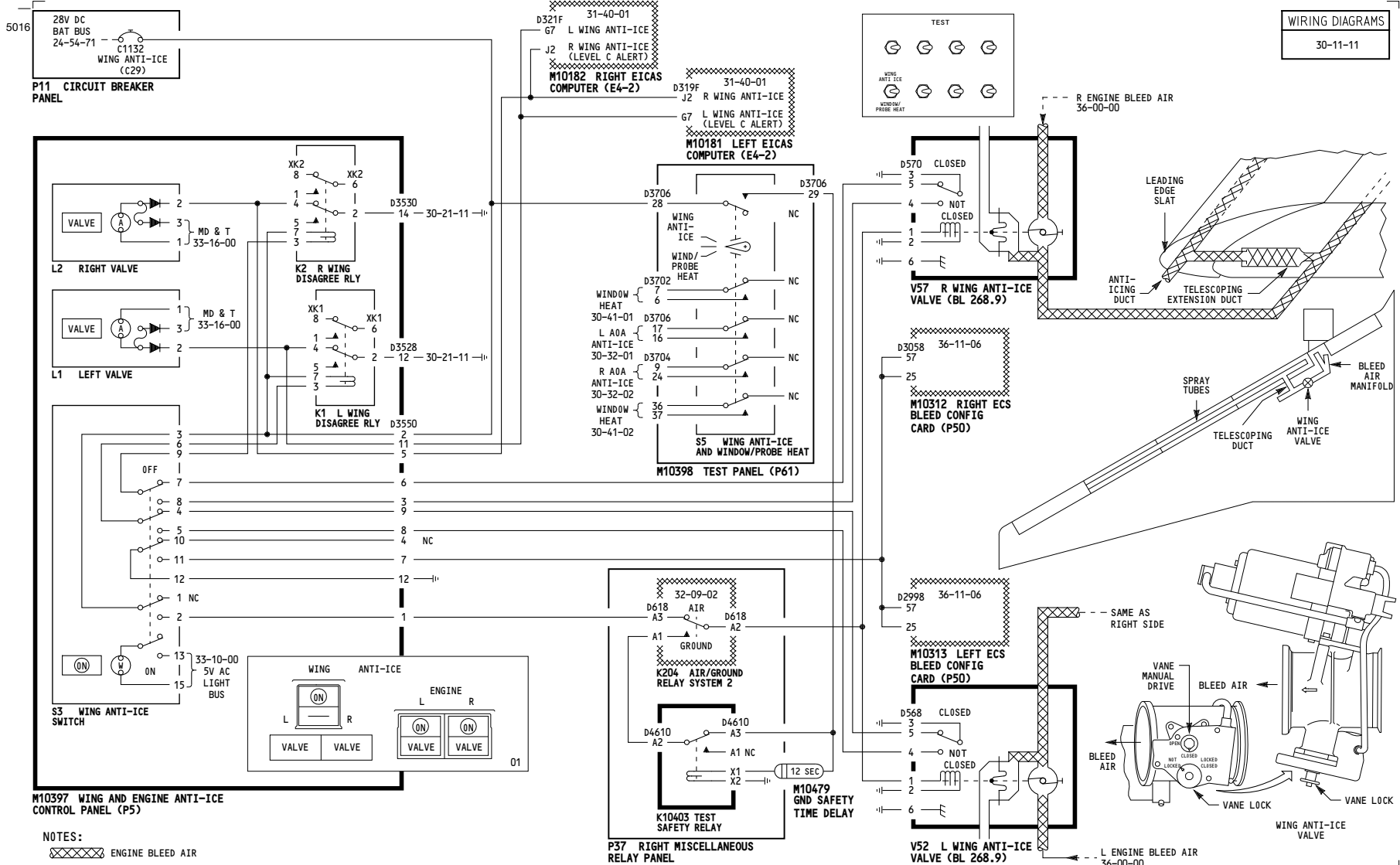
CHAPTER 30  
ICE AND RAIN PROTECTION

CH-SC-SU	Title
30-34-01	ENGINE PROBE HEAT
30-32-01	LEFT ANGLE OF ATTACK PROBE HEAT
30-21-01	LEFT ENGINE COWL ANTI-ICE
30-41-01	LEFT FORWARD WINDOW 1 HEAT SYSTEM
30-31-01	LEFT PITOT PROBE HEAT
30-41-05	LEFT SIDE WINDOW 3 HEAT SYSTEM
30-41-03	LEFT SLIDING WINDOW 2 HEAT SYSTEM
30-43-01	RAIN REPELLENT SYSTEM
30-32-02	RIGHT ANGLE OF ATTACK PROBE HEAT
30-21-02	RIGHT ENGINE COWL ANTI-ICE
30-41-02	RIGHT FORWARD WINDOW 1 HEAT SYSTEM
30-31-02	RIGHT PITOT PROBE HEAT
30-41-06	RIGHT SIDE WINDOW 3 HEAT SYSTEM
30-41-04	RIGHT SLIDING WINDOW 2 HEAT SYSTEM
30-33-01	RIGHT TOTAL AIR TEMPERATURE PROBE HEAT
30-71-01	WATER AND WASTE SYSTEM HEATERS
30-42-01	WINDSHIELD WIPERS
30-11-01	WING THERMAL ANTI-ICE

CH-SC-SU	Title
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**30-ALPHABETICAL INDEX**

WIRING DIAGRAMS  
30-11-11



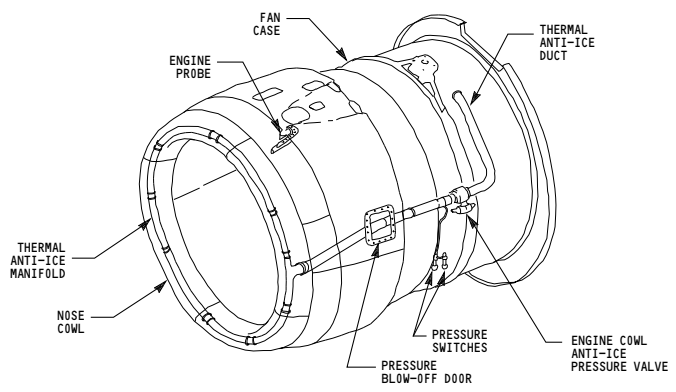
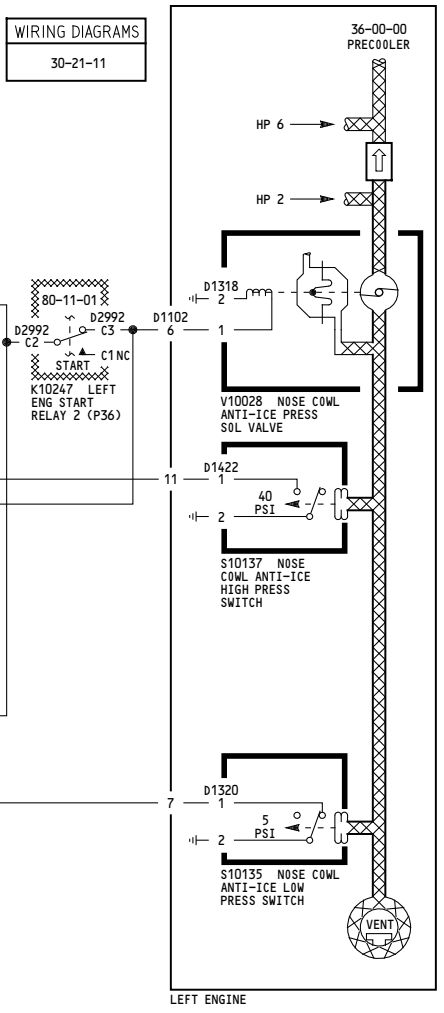
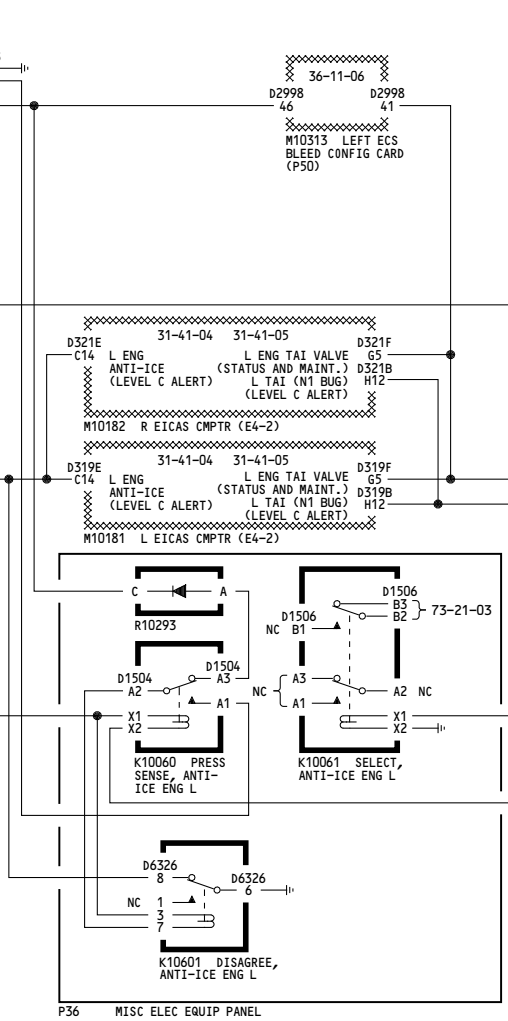
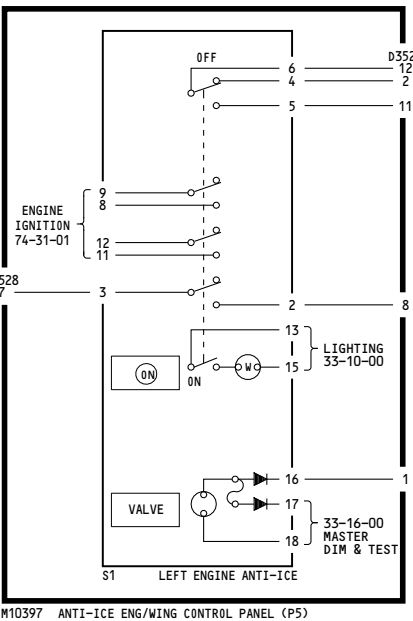
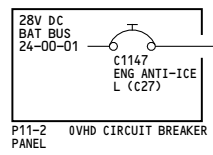
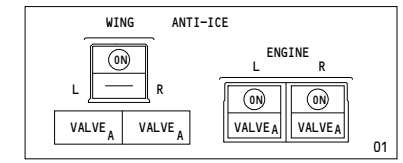
NOTES:  
ENGINE BLEED AIR

ALL	<p><b>WING THERMAL ANTI-ICE</b></p> <p>D280N032S</p>
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**30-11-01**

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WIRING DIAGRAMS  
30-21-11



001-003	<p align="center"><b>LEFT ENGINE COWL ANTI-ICE</b></p> <p align="center">D280N032S</p>
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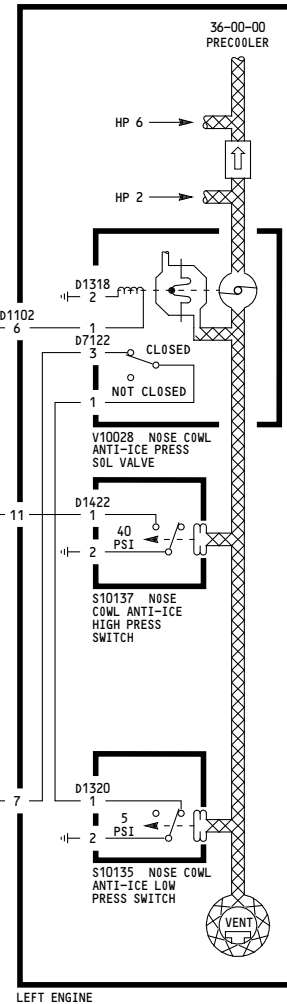
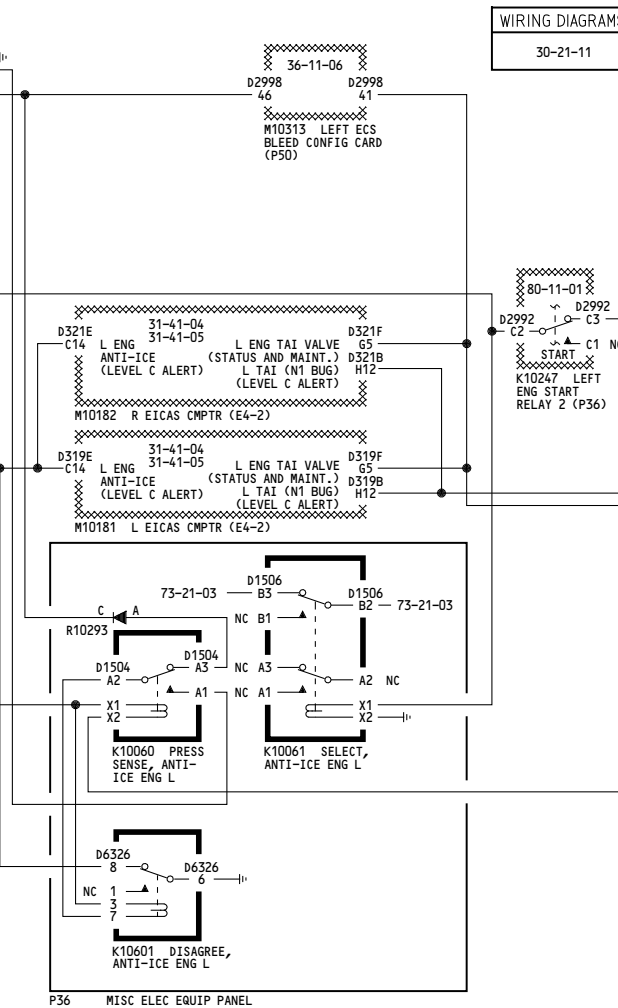
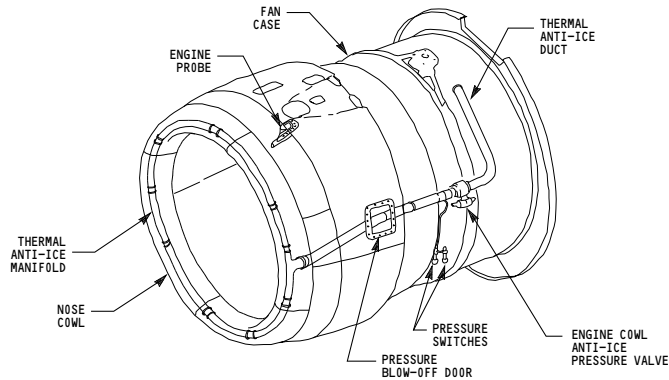
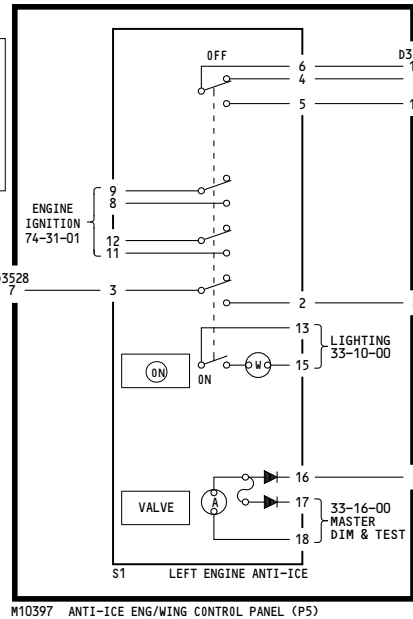
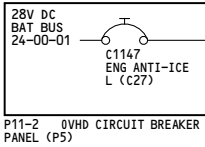
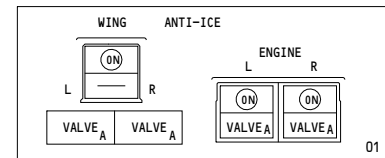
**30-21-01**

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004-099

**LEFT ENGINE COWL ANTI-ICE**

D280N032S

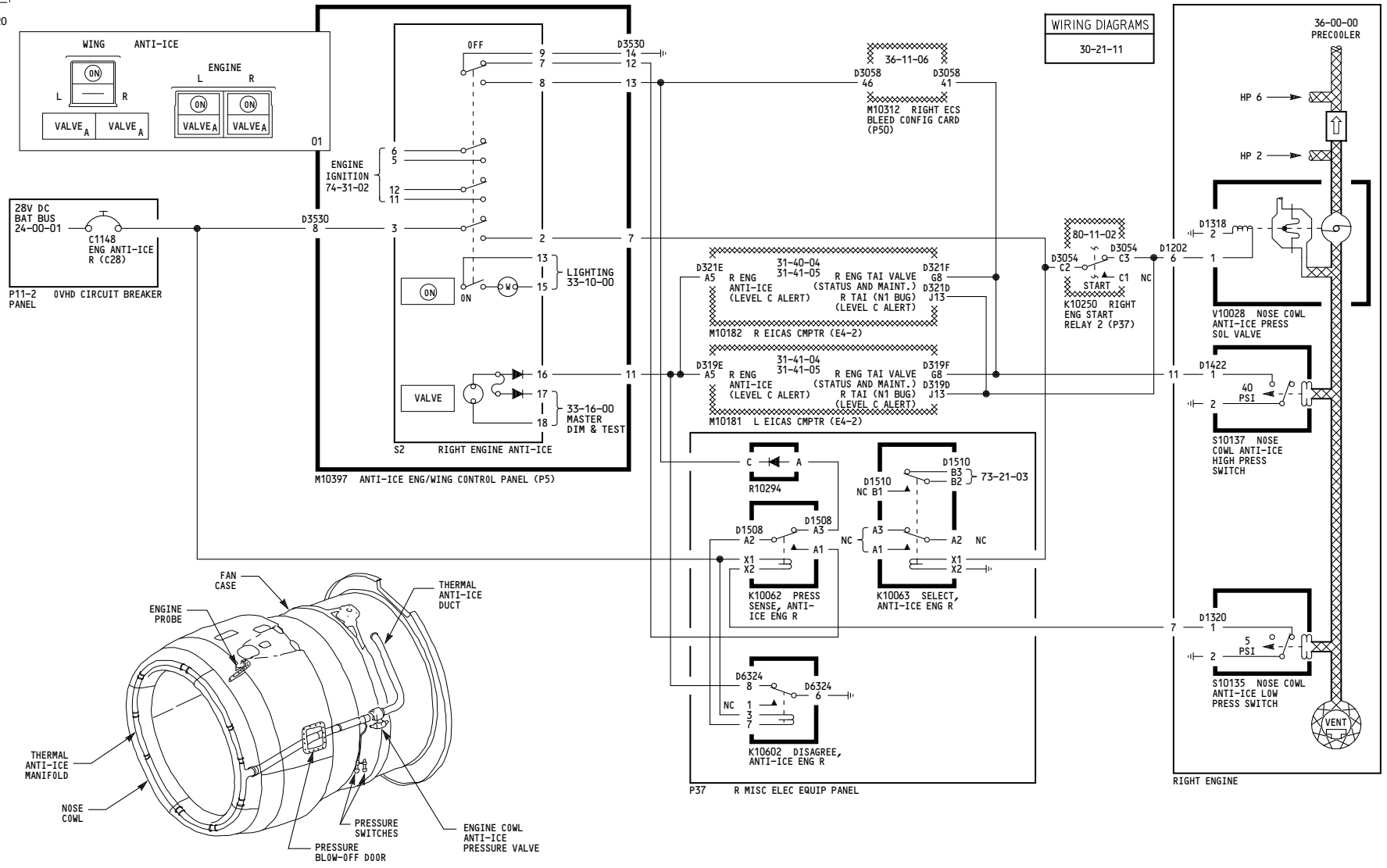
**30-21-01**

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Jan 21/2005

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WIRING DIAGRAMS  
30-21-11



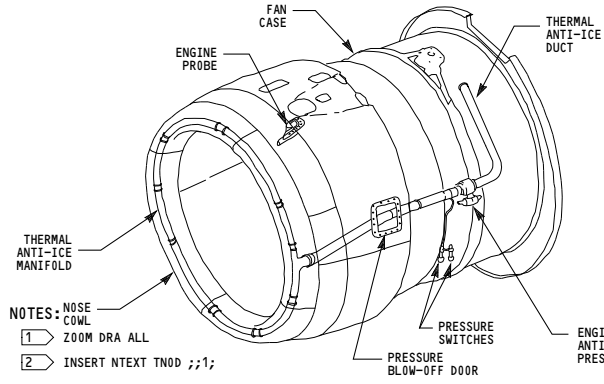
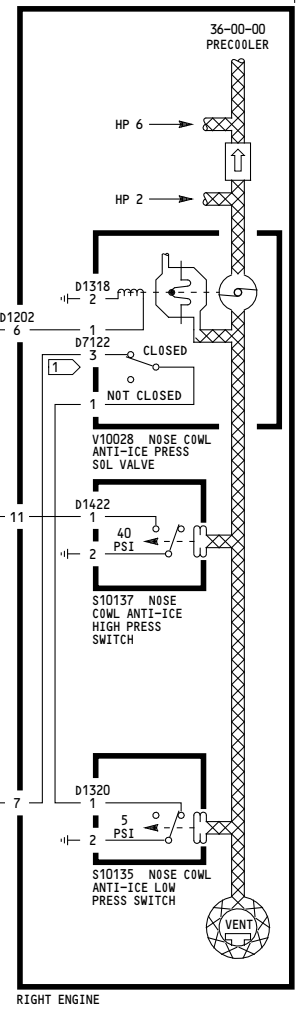
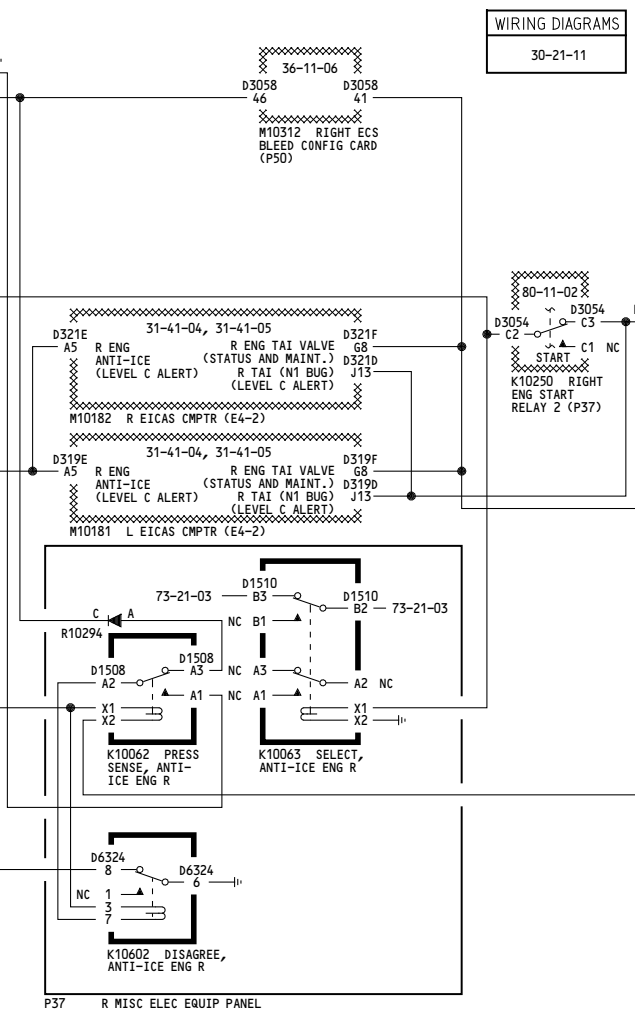
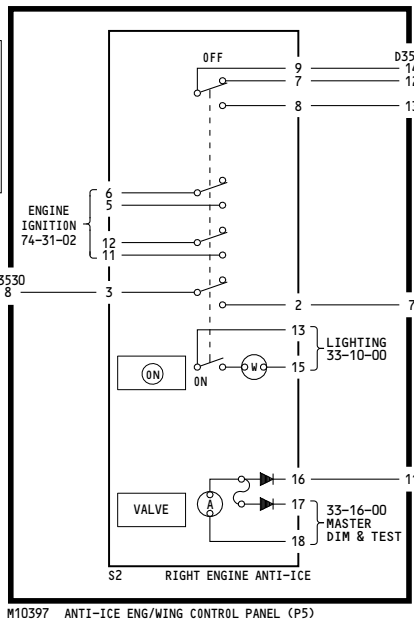
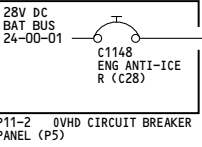
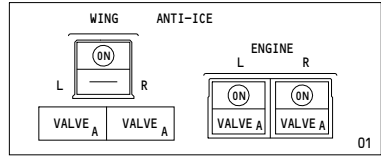
001-003	<p align="center"><b>RIGHT ENGINE COWL ANTI-ICE</b></p> <p align="center">D280N032S</p>
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**30-21-02**

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1 THE SWITCH ASSOCIATED WITH D7122/V10028 TRANSFERS TO THE NOT CLOSED POSITION WHEN THE VALVE IS NEAR THE FULLY OPEN

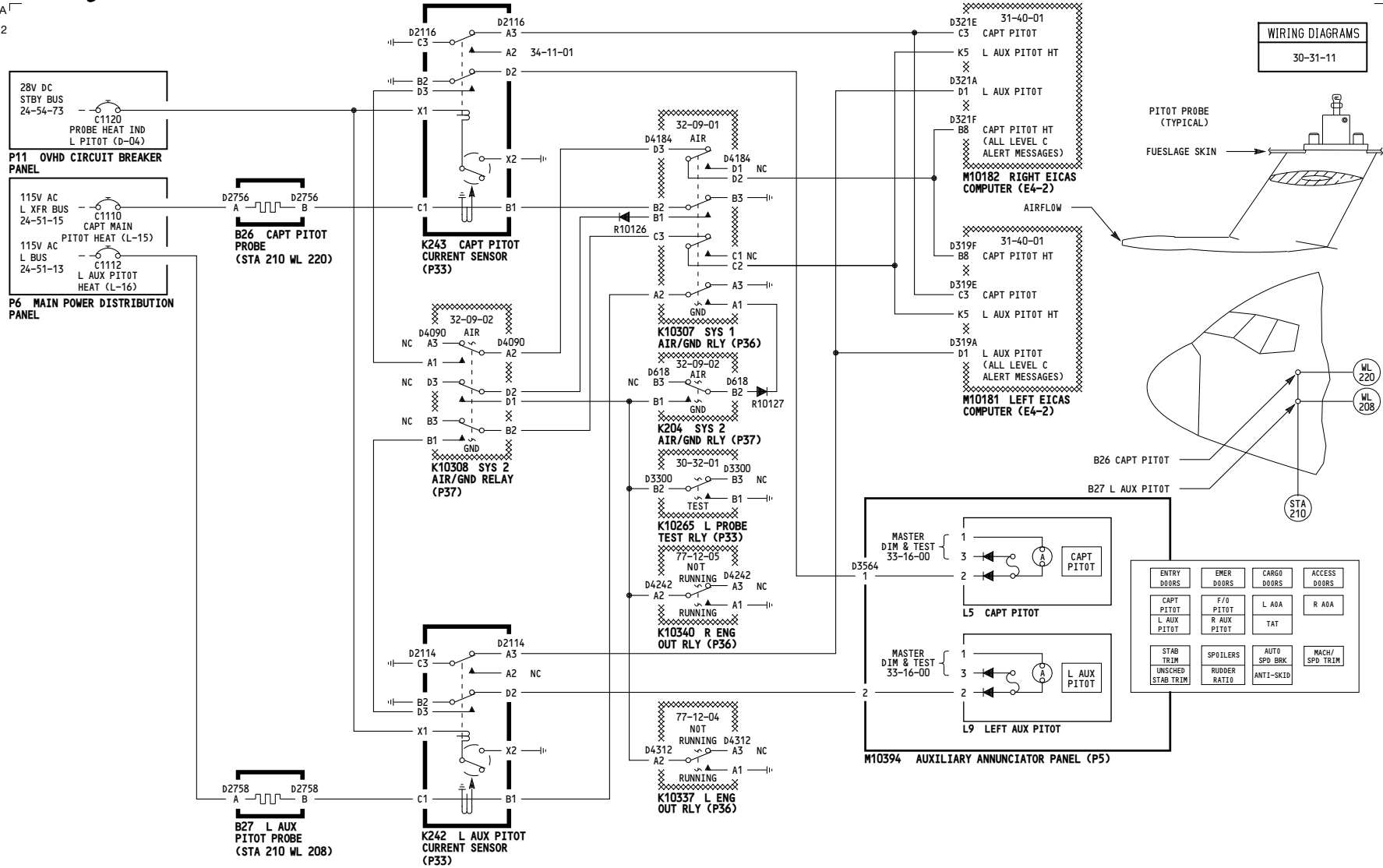
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**RIGHT ENGINE COWL ANTI-ICE**

D280N032S

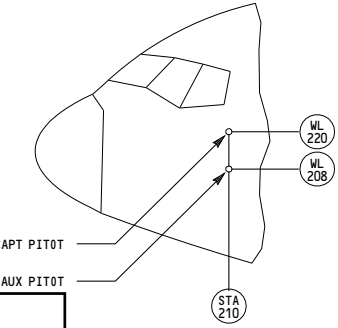
**30-21-02**

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WIRING DIAGRAMS  
30-31-11

ALL	LEFT PITOT PROBE HEAT
	D280N032S



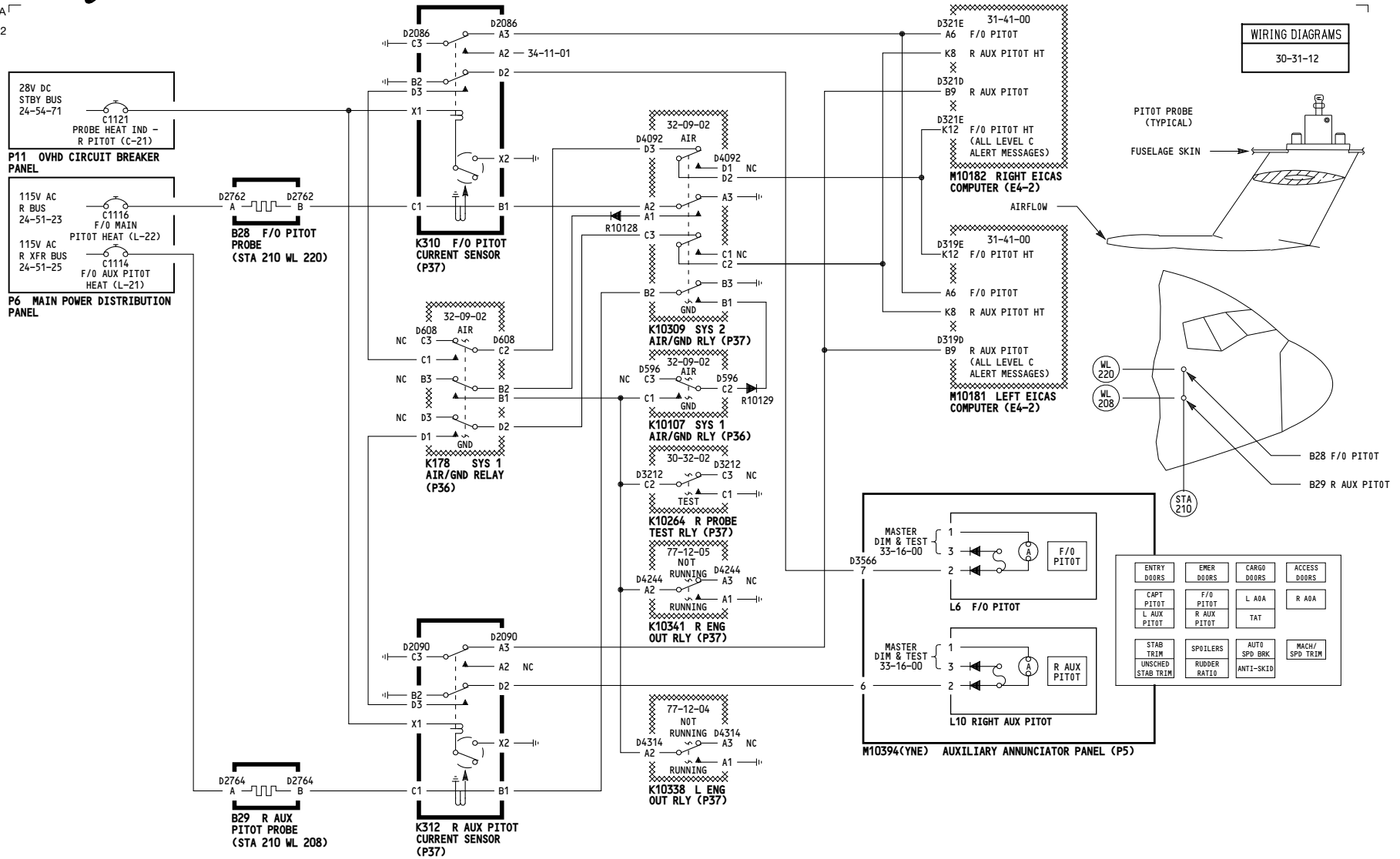
ENTRY DOORS	EMER DOORS	CARGO DOORS	ACCESS DOORS
CAPT PITOT	F70 PITOT	L ADA	R ADA
L AUX PITOT	R AUX PITOT	TAT	
STAB TRIM	SPOILERS	AUTO SPD BRK	MAC/SPD TRIM
UNSCHED STAB TRIM	RUDDER RATIO	ANTI-SKID	

**30-31-01**

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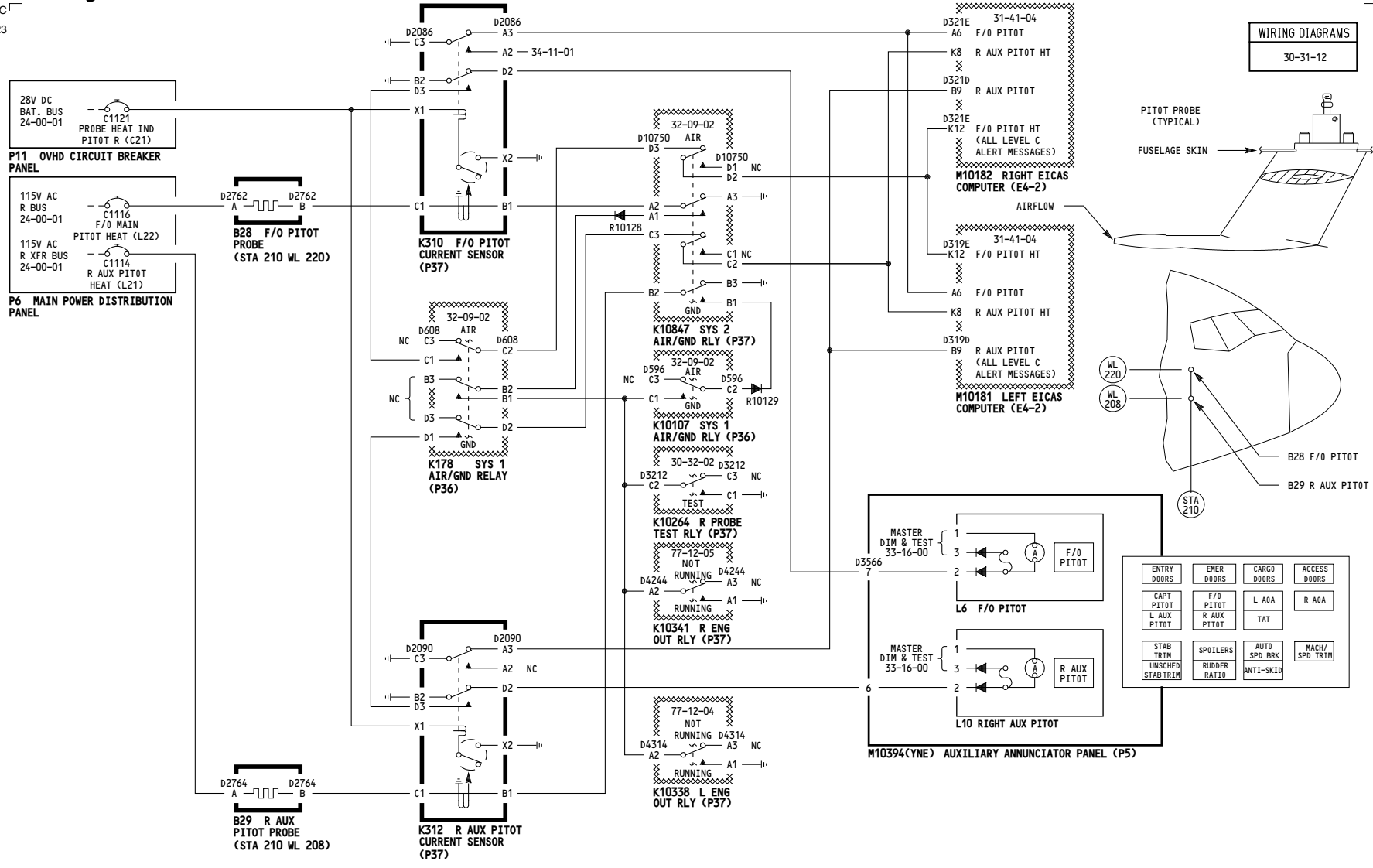
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5012



ALL	<b>RIGHT PITOT PROBE HEAT</b>
	D280N032S

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WIRING DIAGRAMS  
30-31-12

001-011	<p align="center"><b>RIGHT PITOT PROBE HEAT</b></p> <p align="center">D280N032S</p>
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Incorporates  
27A0130 R01

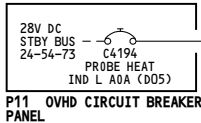
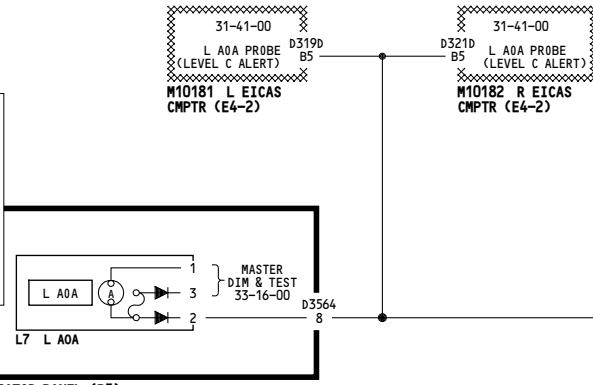
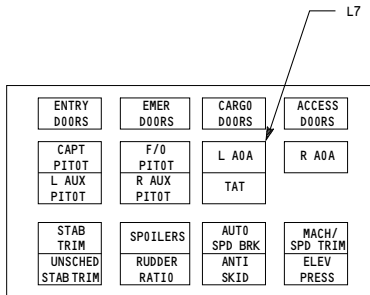
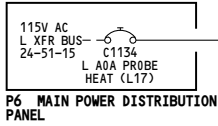
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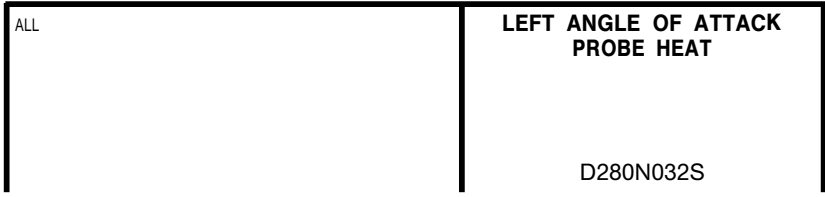
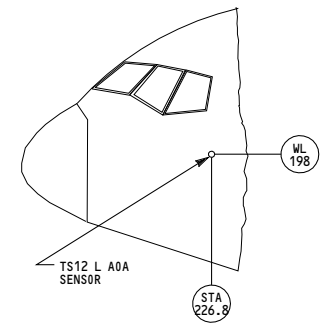
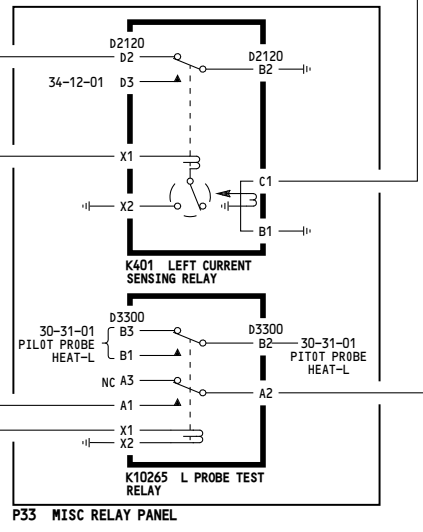
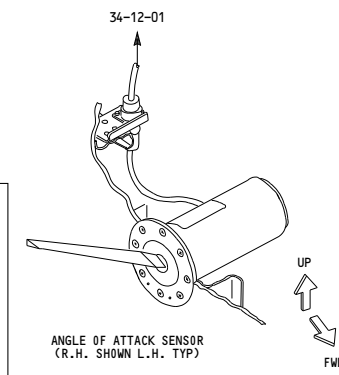
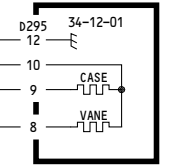
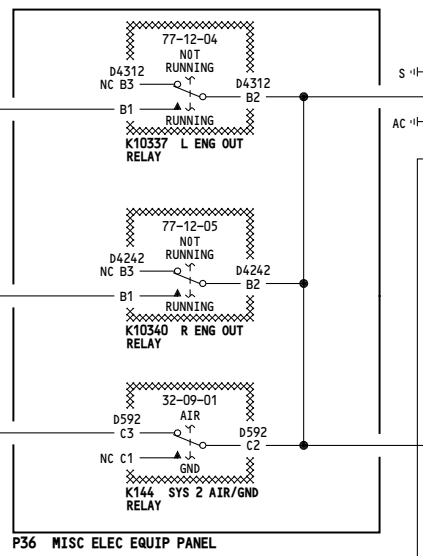
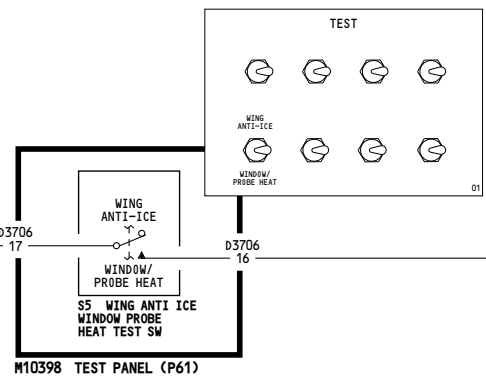
May 06/2009

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WIRING DIAGRAMS  
30-32-11



**M10394 ANNUNCIATOR PANEL (P5)**

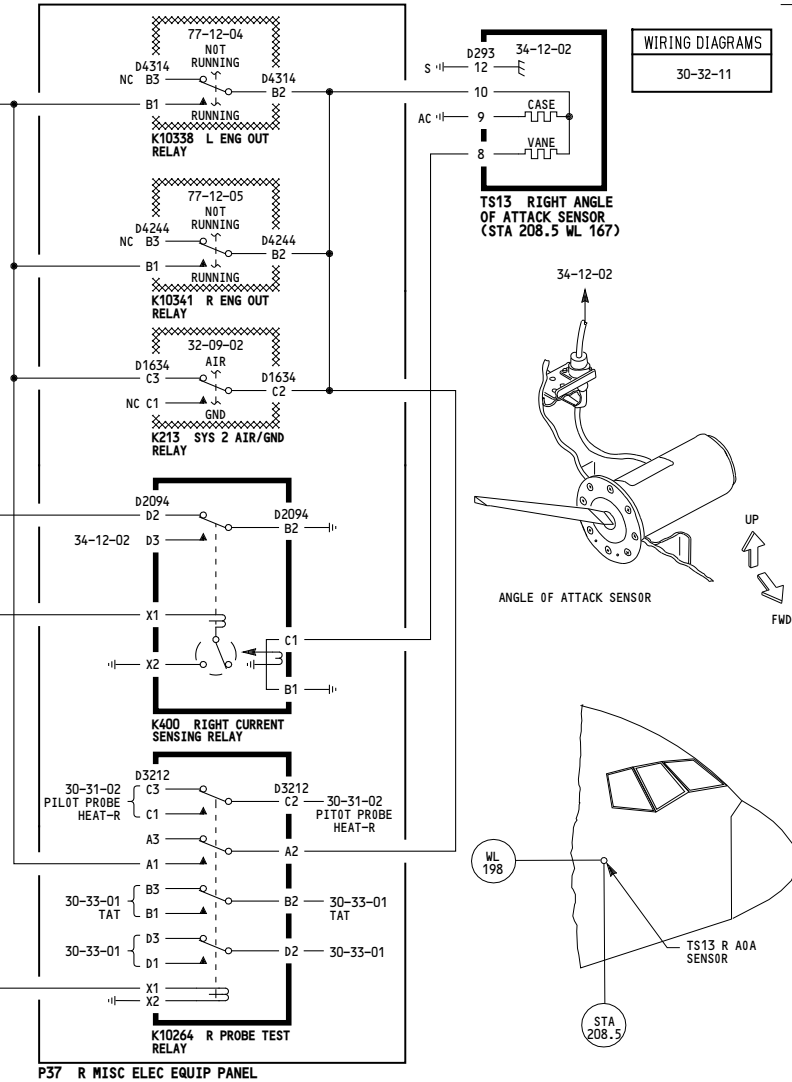
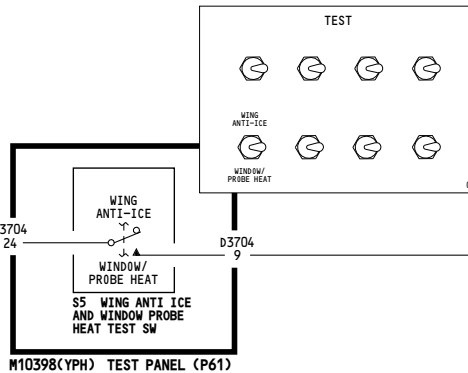
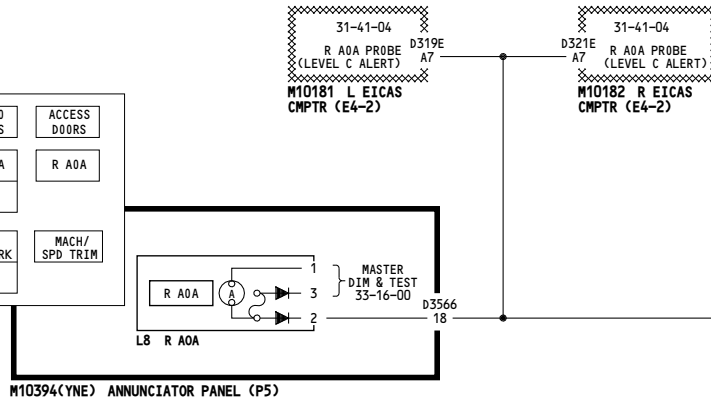
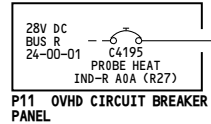
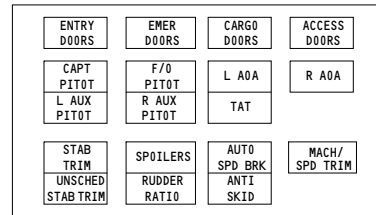
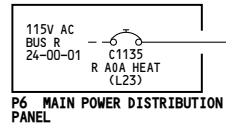


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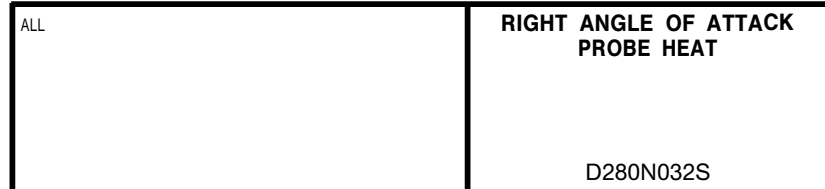
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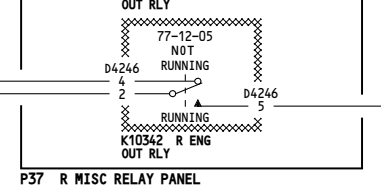
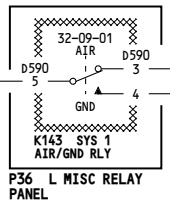
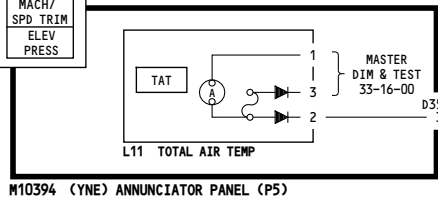
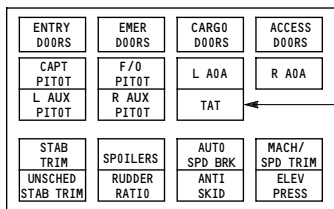
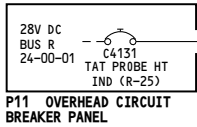
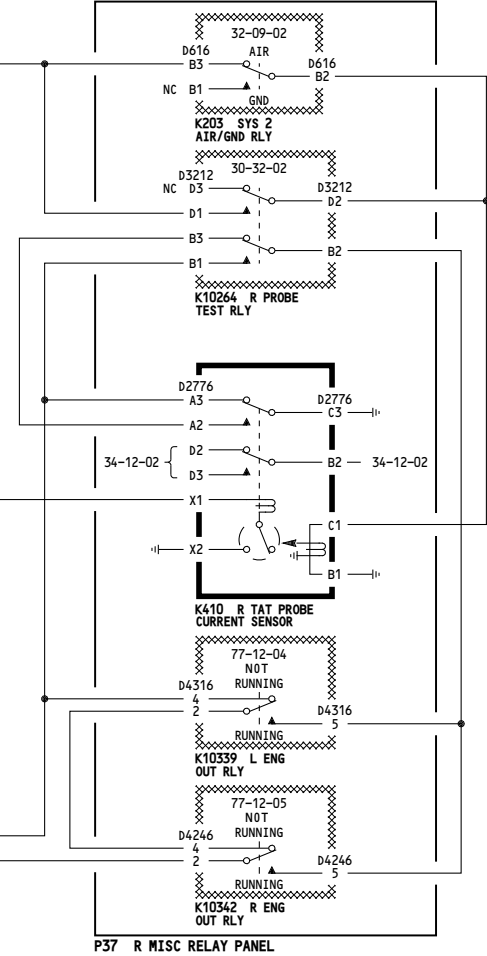
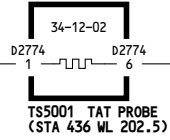
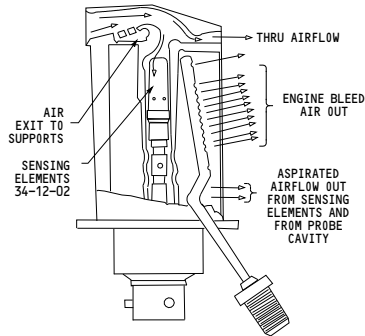
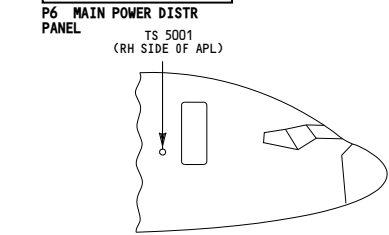
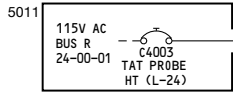


WIRING DIAGRAMS  
30-32-11



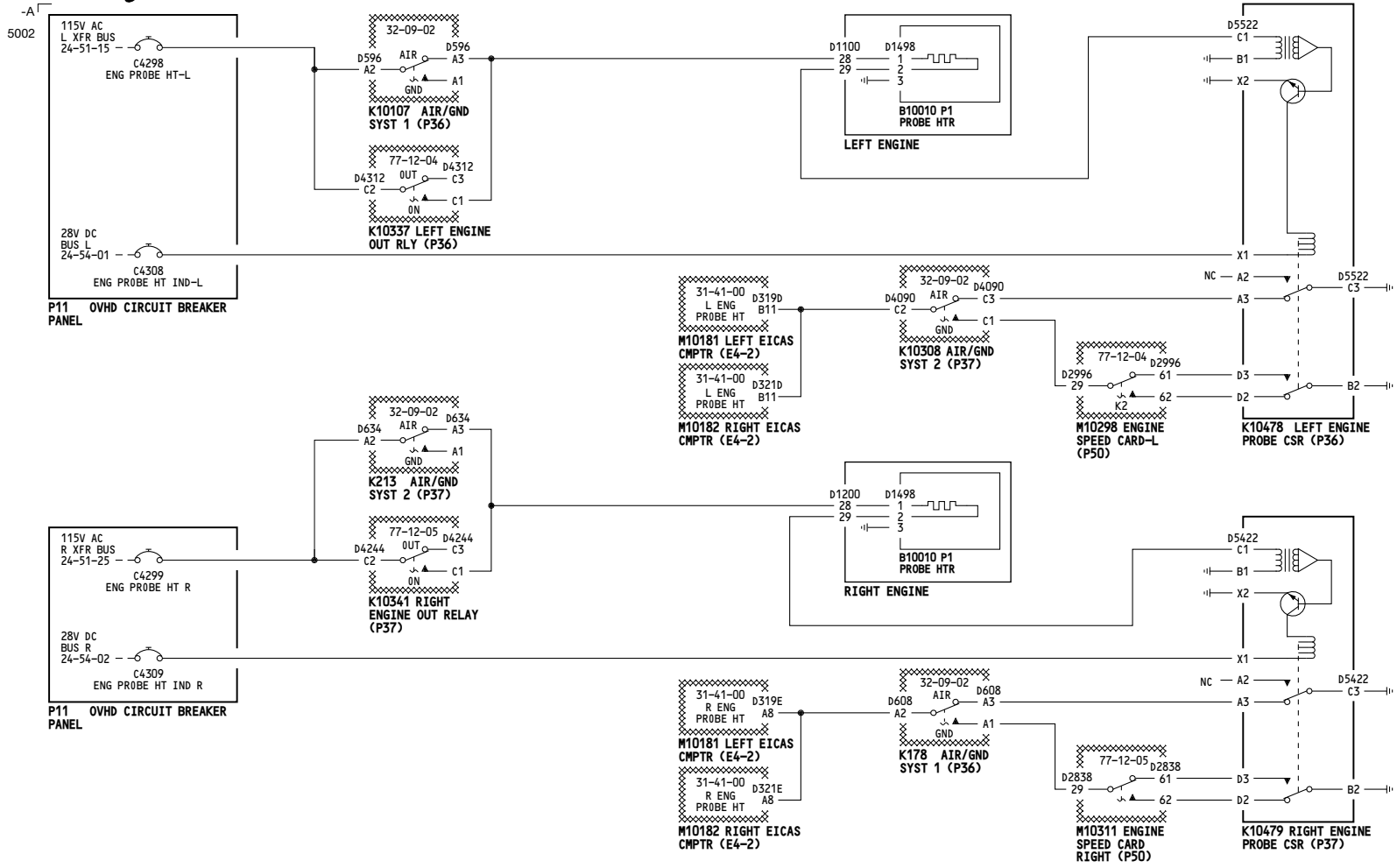
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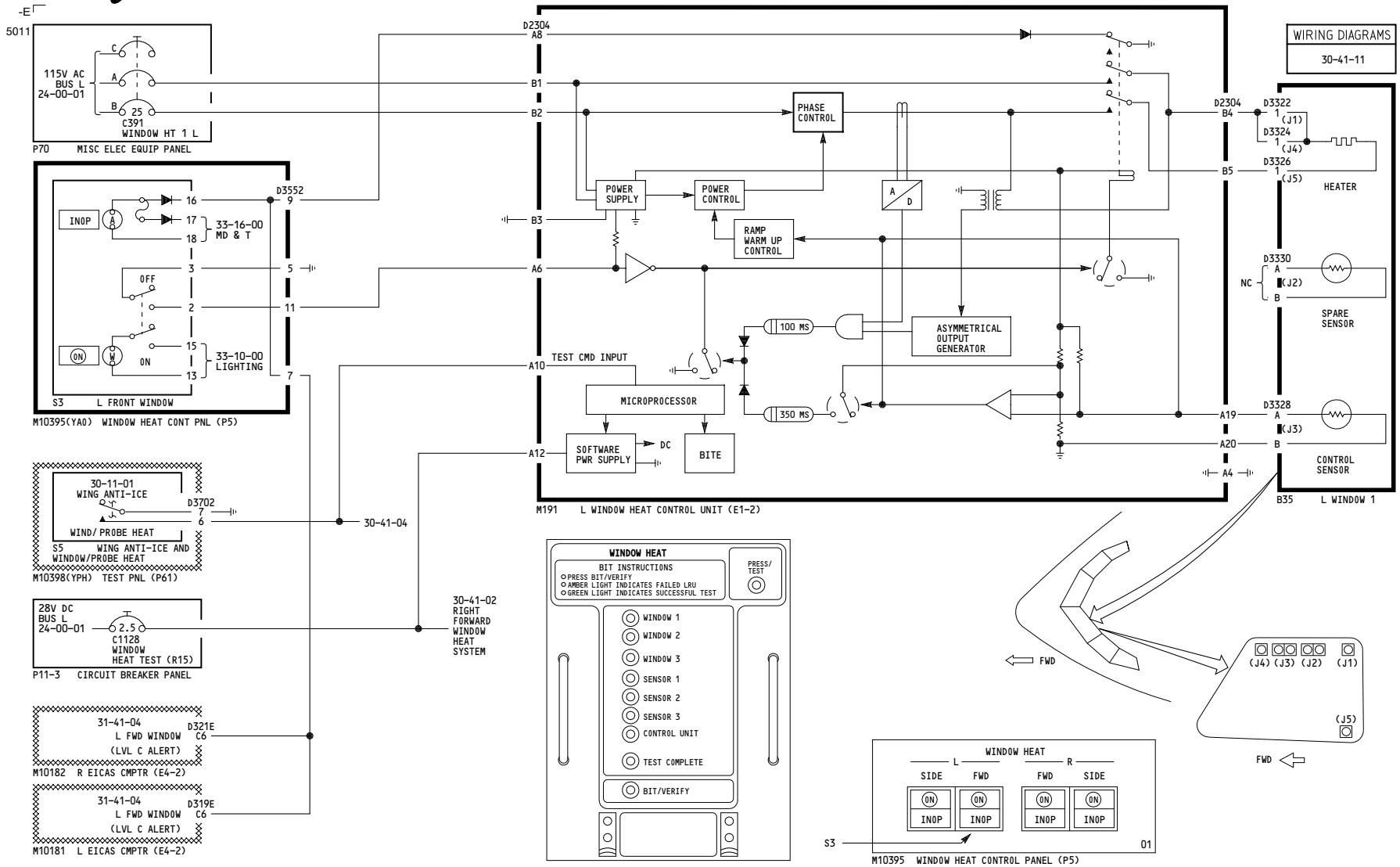
ALL	<b>RIGHT TOTAL AIR TEMPERATURE PROBE HEAT</b>
	D280N032S

WIRING DIAGRAMS  
30-34-21  
30-34-22



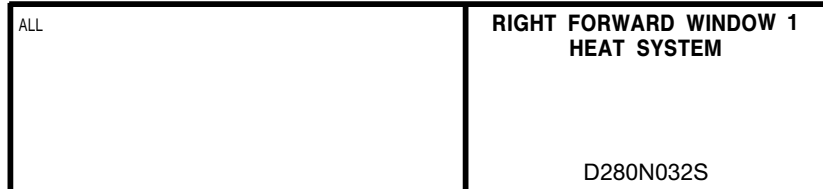
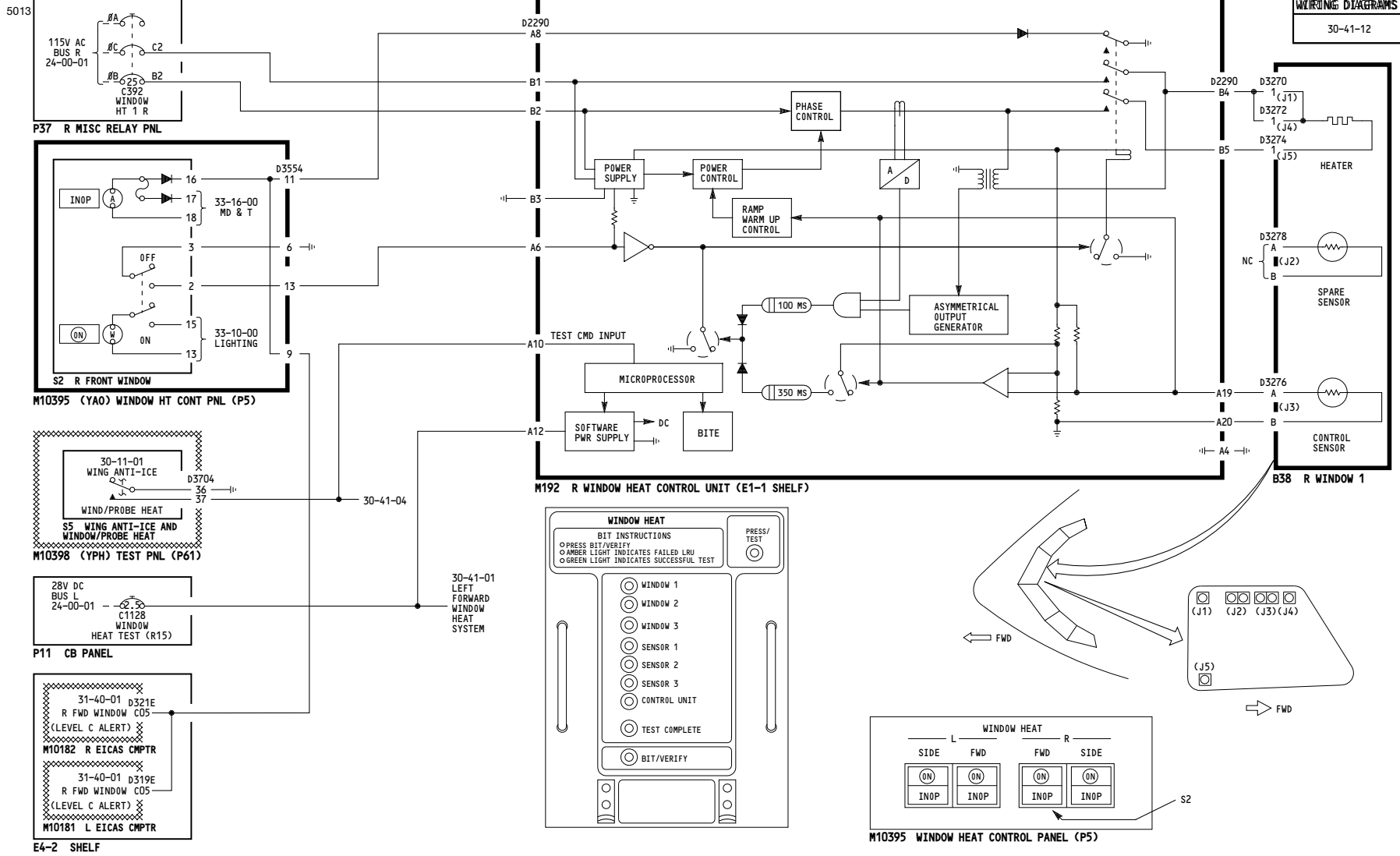
ALL	ENGINE PROBE HEAT
	D280N032S

**30-34-01**



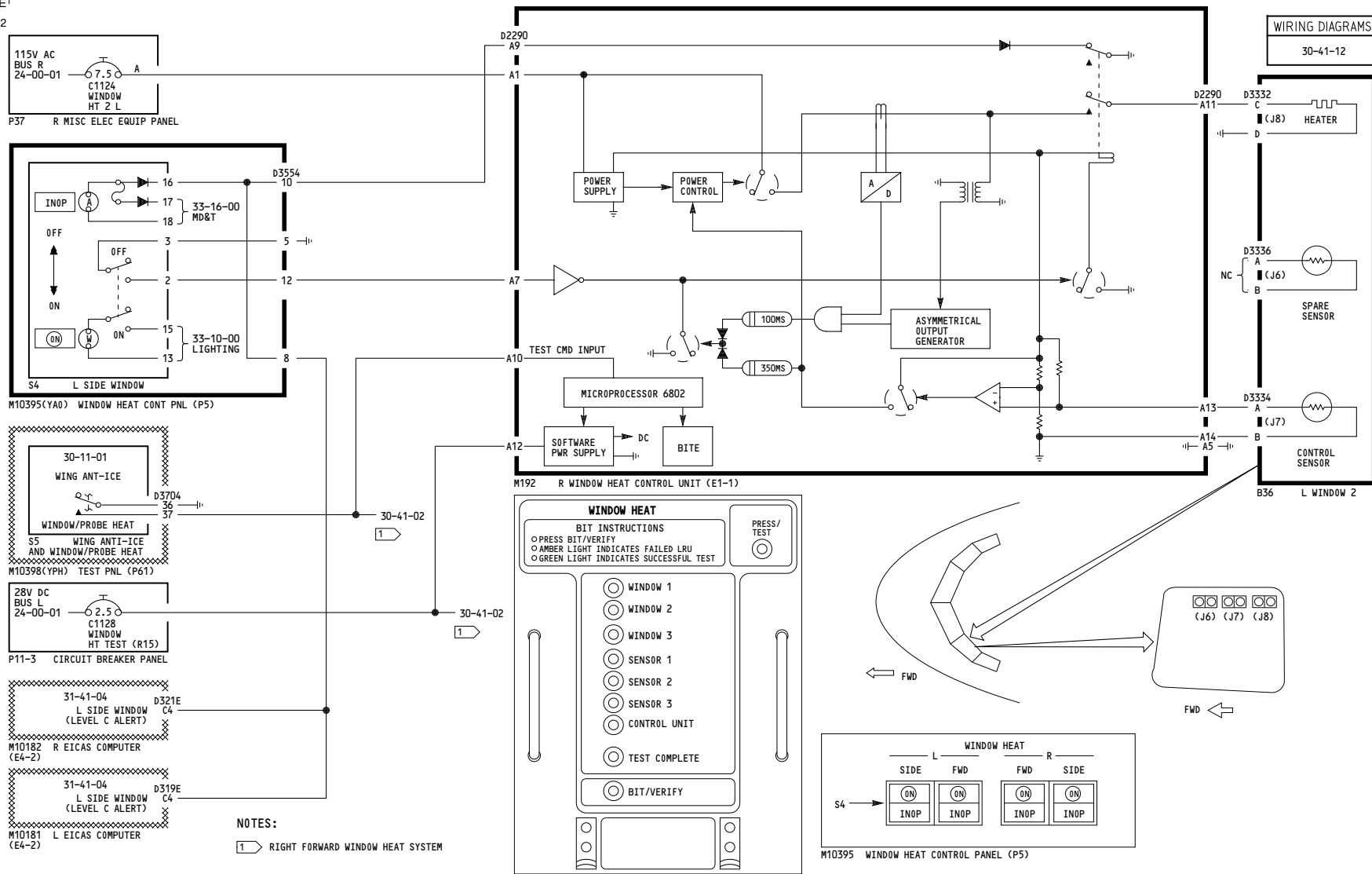
ALL	<b>LEFT FORWARD WINDOW 1 HEAT SYSTEM</b>
	D280N032S

**30-41-01**



30-41-02

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ALL

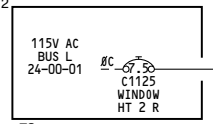
**LEFT SLIDING WINDOW 2 HEAT SYSTEM**

D280N032S

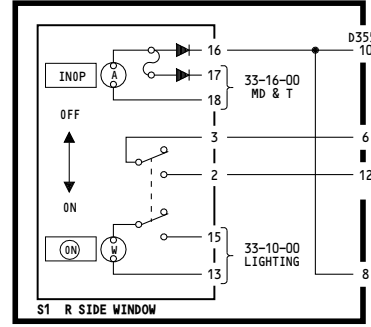
**30-41-03**

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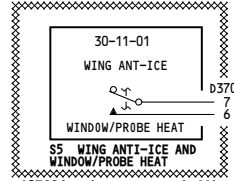
WIRING DIAGRAMS  
30-41-11



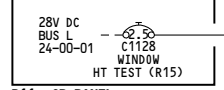
P70 MISC RELAY PANEL



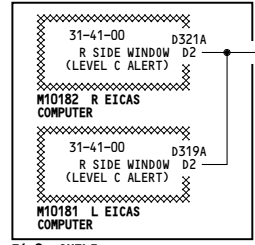
M10395(YAD) WINDOW HT CONT PNL (P5)



M10398(YPH) TEST PNL (P61)

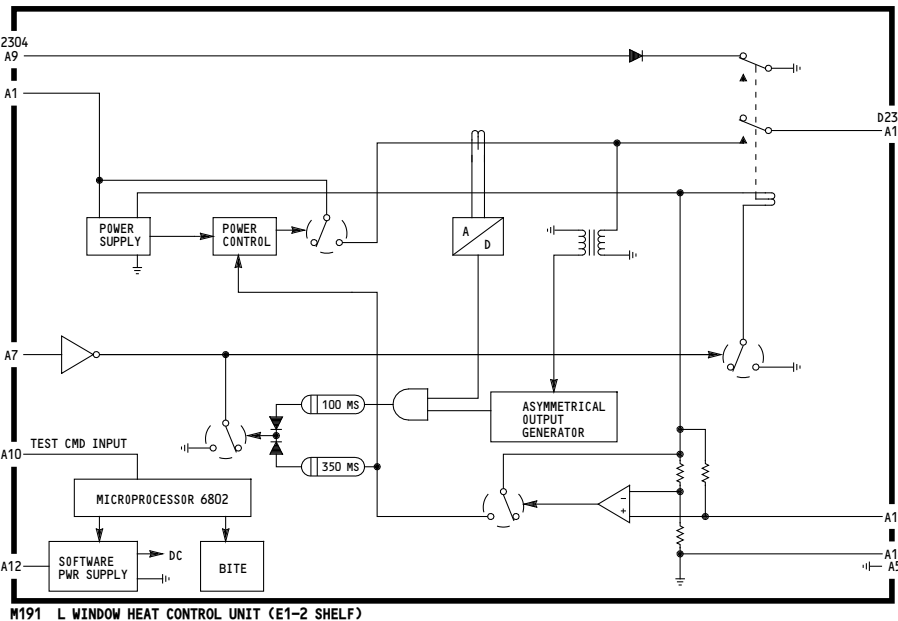


P11 CB PANEL

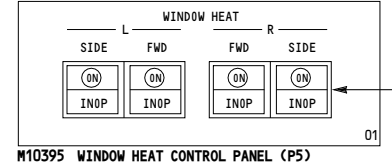
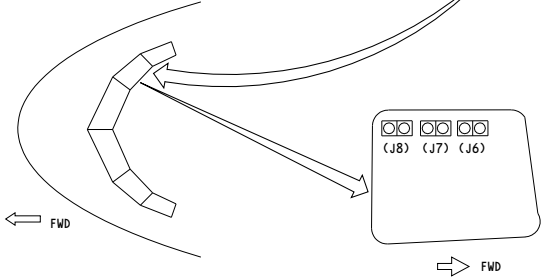
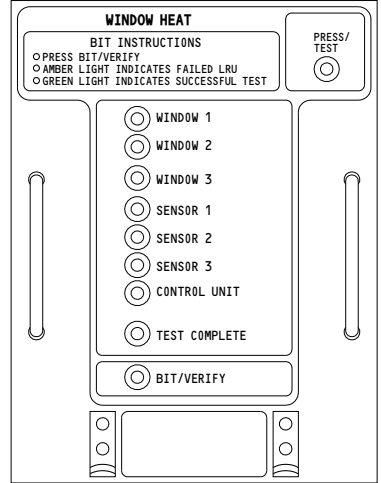


E4-2 SHELF

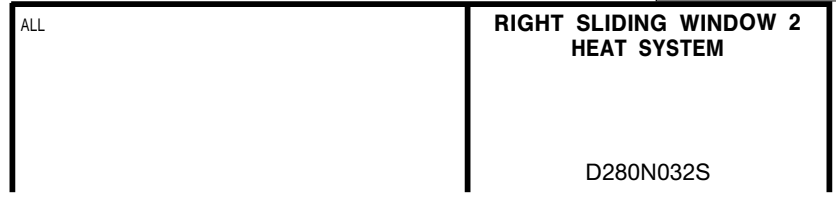
NOTES:  
1 LEFT FORWARD WINDOW HEAT SYSTEM



M191 L WINDOW HEAT CONTROL UNIT (E1-2 SHELF)



M10395 WINDOW HEAT CONTROL PANEL (P5)

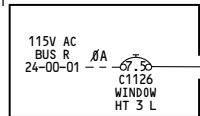


30-41-04

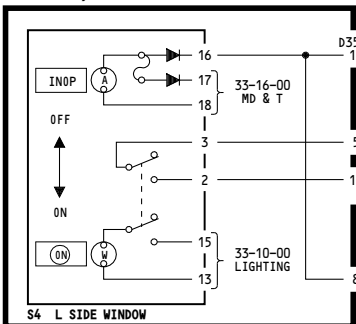
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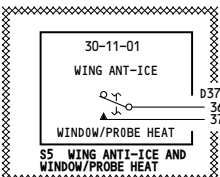
5011



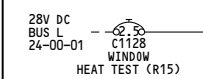
P37 PANEL MISC ELEC EQUIP, R



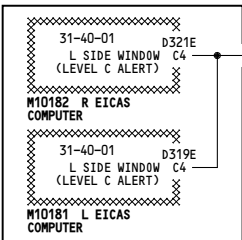
M10395 (YAO) WINDOW HT CONT PNL (P5)



M10398 (YPH) TEST PNL (P61)



P11 CB PANEL



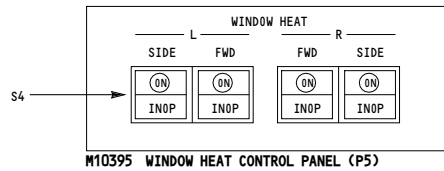
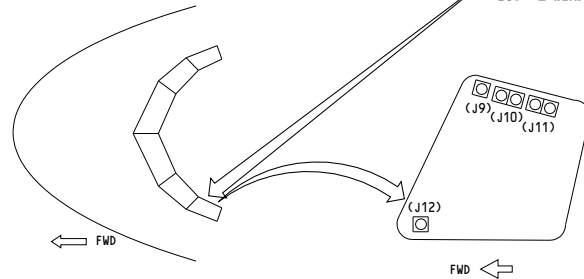
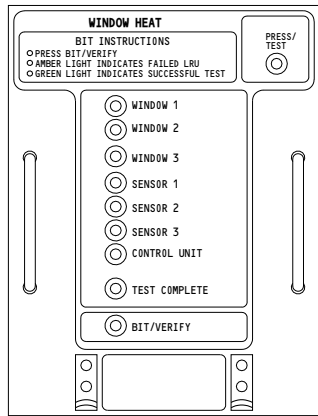
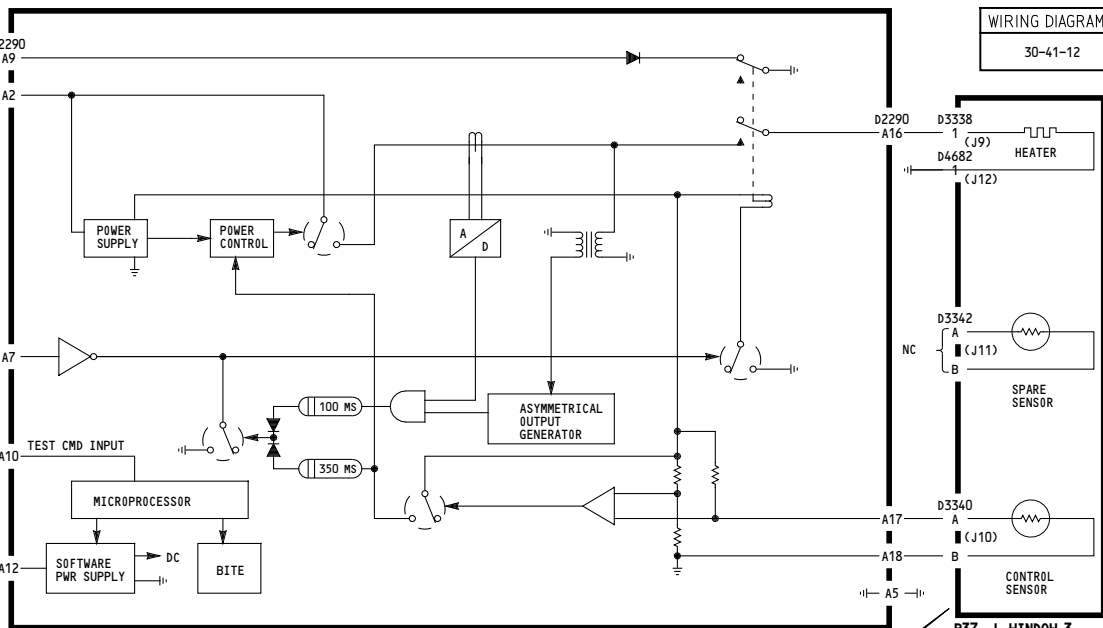
E4-2 SHELF



LEFT SIDE WINDOW 3 HEAT SYSTEM

D280N032S

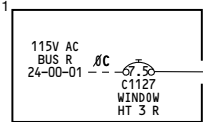
- NOTES:
- 1 LEFT FORWARD WINDOW HEAT SYSTEM
  - 2 RIGHT FORWARD WINDOW HEAT SYSTEM



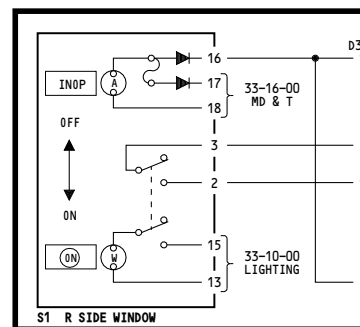
M10395 WINDOW HEAT CONTROL PANEL (P5)

30-41-05

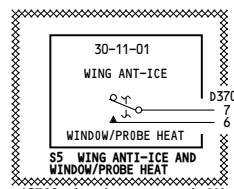
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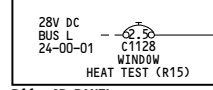
P70 MISC RELAY PANEL



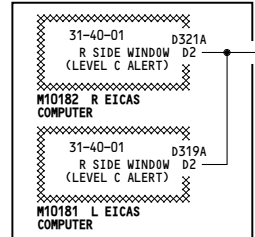
M10395 (YAO) WINDOW HT CONT PNL (P5)



M10398 (YPH) TEST PNL (P61)

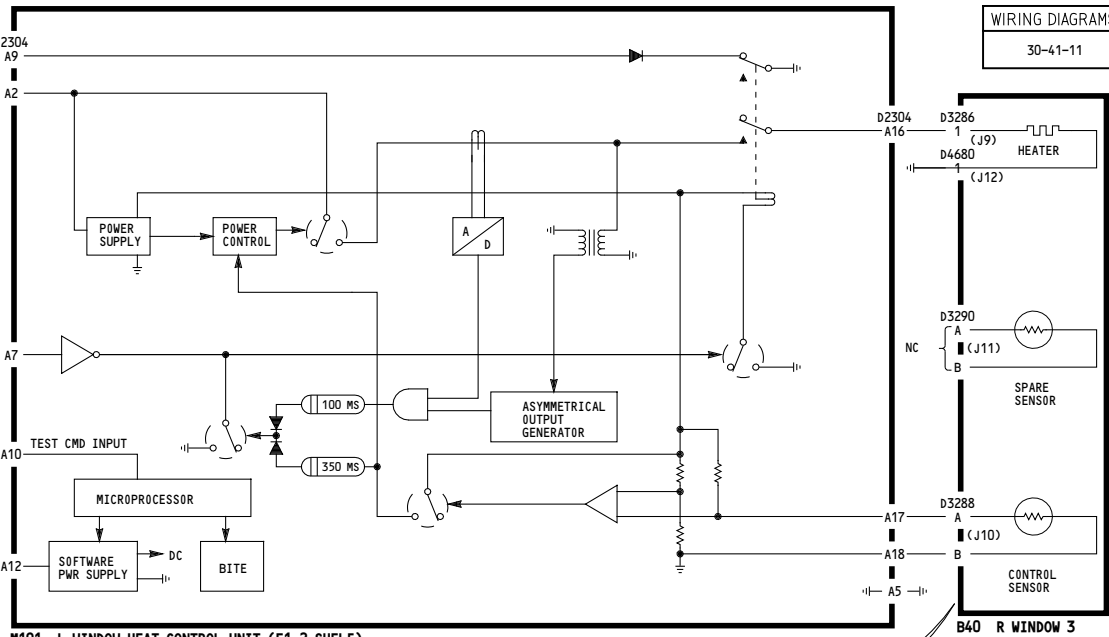


P11 CB PANEL

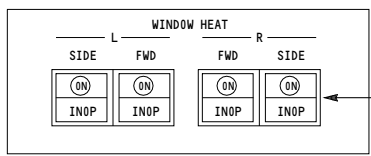
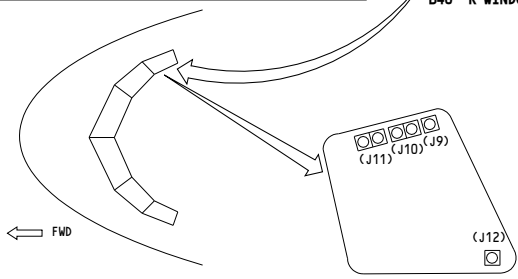
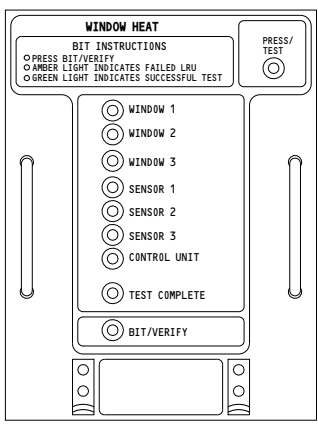


E4-2 SHELF

NOTES:  
1 LEFT FORWARD WINDOW HEAT SYSTEM



M191 L WINDOW HEAT CONTROL UNIT (E1-2 SHELF)



M10395 WINDOW HEAT CONTROL PANEL (P5)

WIRING DIAGRAMS  
30-41-11



RIGHT SIDE WINDOW 3 HEAT SYSTEM

D280N032S

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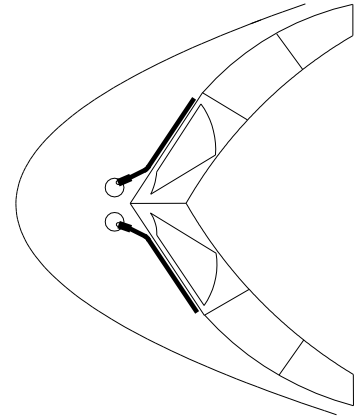
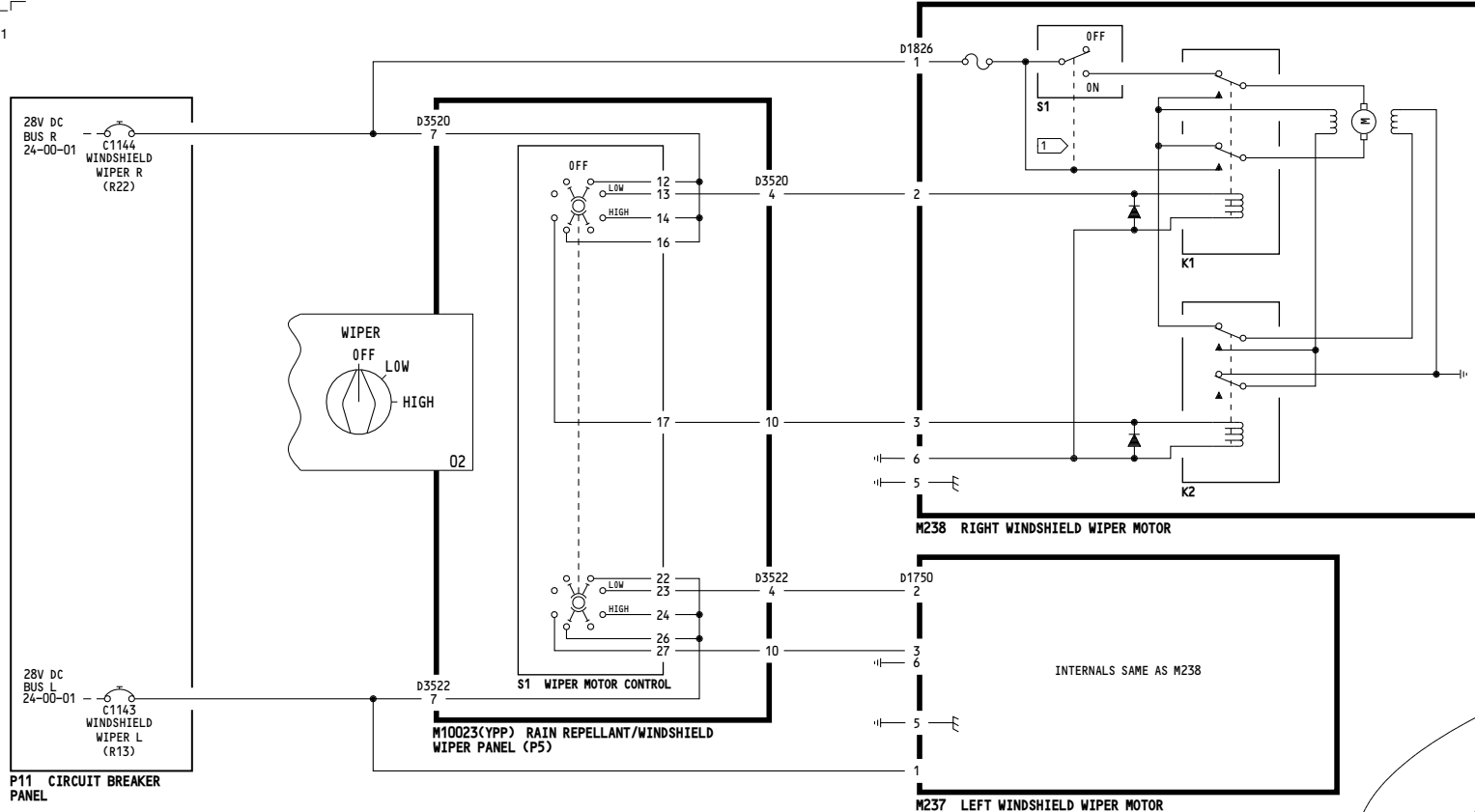
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WIRING DIAGRAMS  
30-42-11



NOTE: WIPERS IN PARK POSITION

1 AFTER SELECTING "WIPER OFF"  
S1 REMAINS IN ON POSITION  
UNTIL WIPERS ARE PARKED

ALL	<p><b>WINDSHIELD WIPERS</b></p> <p>D280N032S</p>
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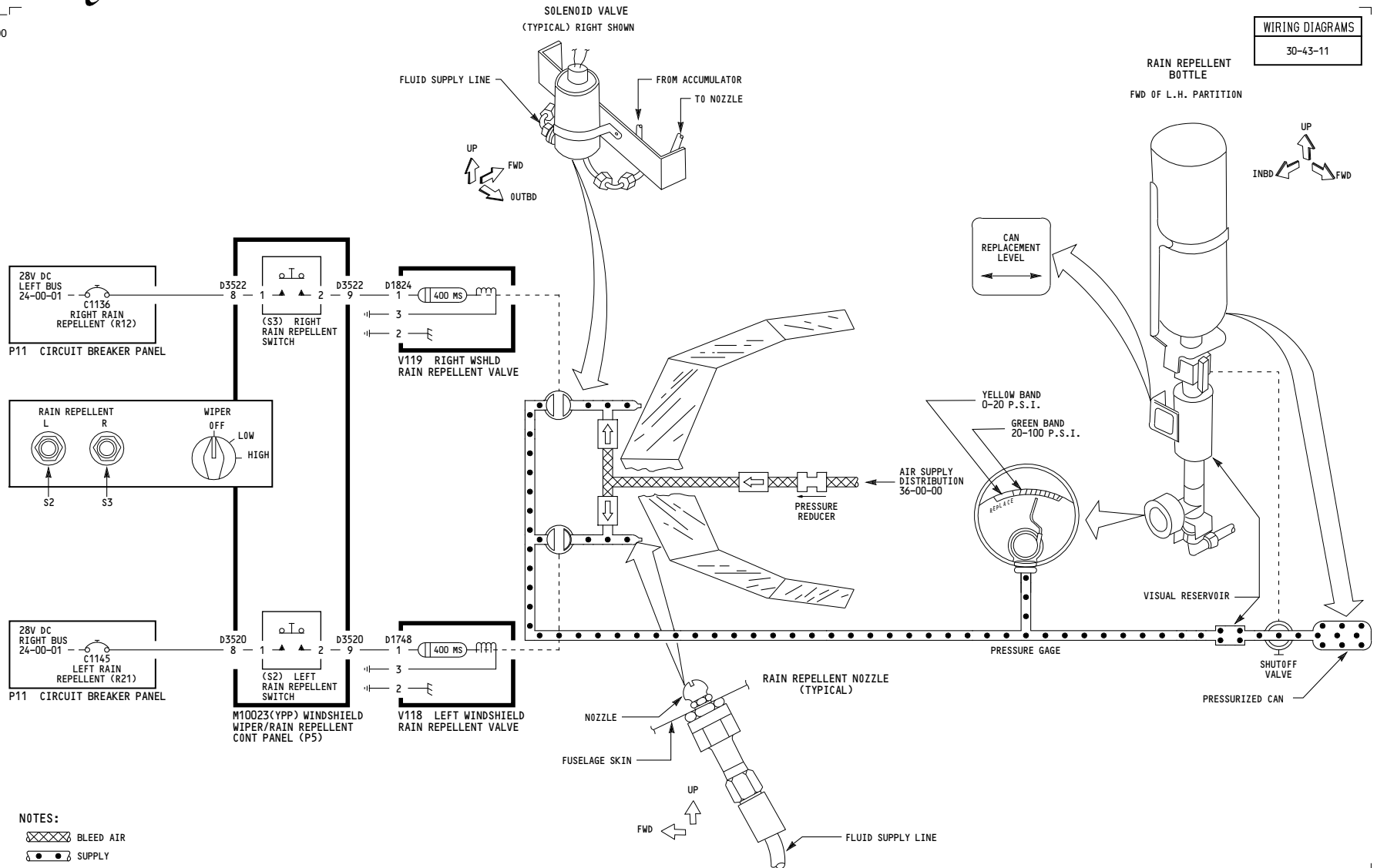
**30-42-01**

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WIRING DIAGRAMS  
30-43-11



- NOTES:**
- ▨ BLEED AIR
  - SUPPLY

ALL	<b>RAIN REPELLENT SYSTEM</b>
	D280N032S

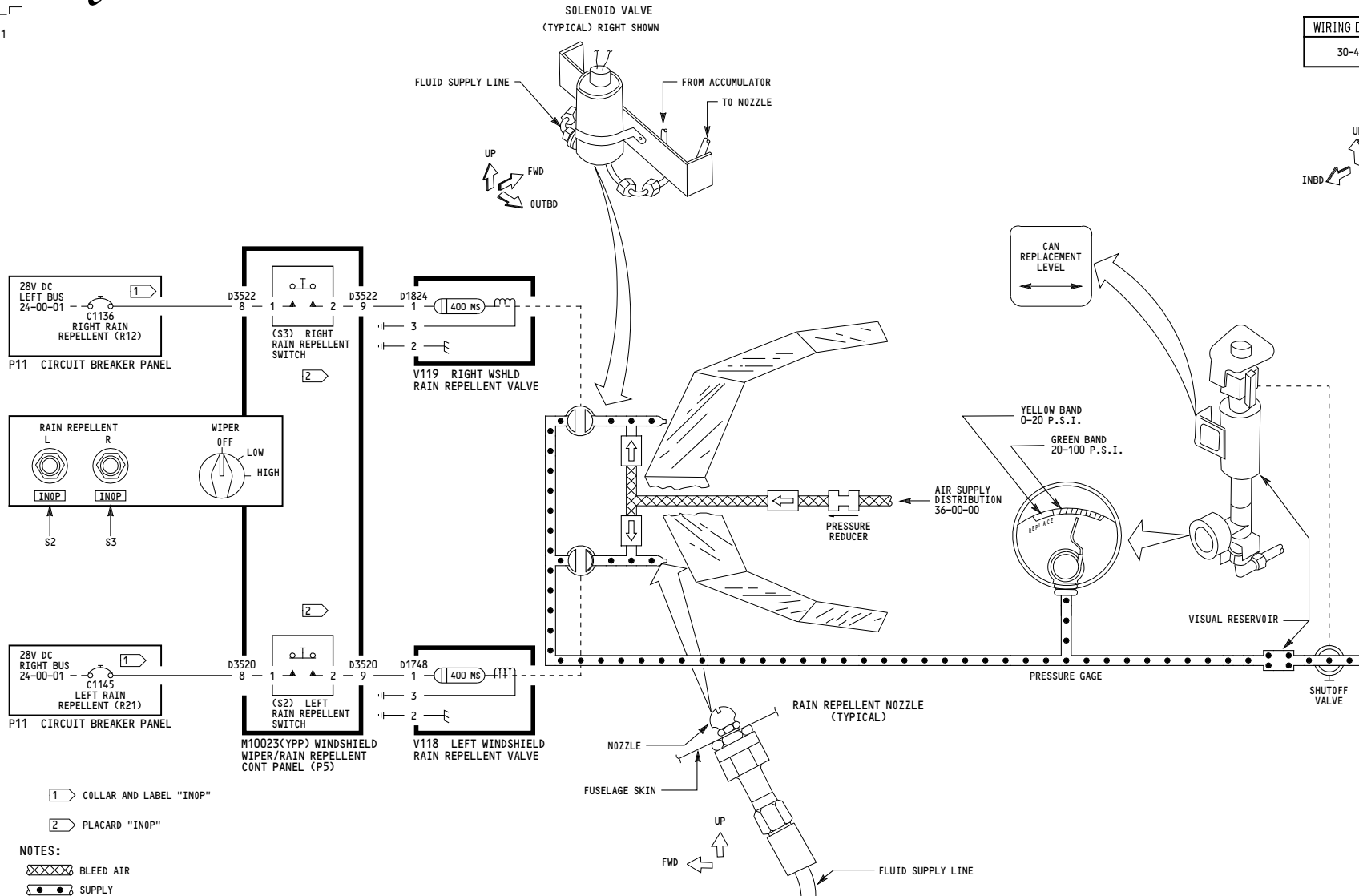
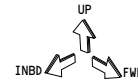
**30-43-01**

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WIRING DIAGRAMS  
30-43-11



- 1 COLLAR AND LABEL "INOP"
- 2 PLACARD "INOP"

- NOTES:
- BLEED AIR
  - SUPPLY

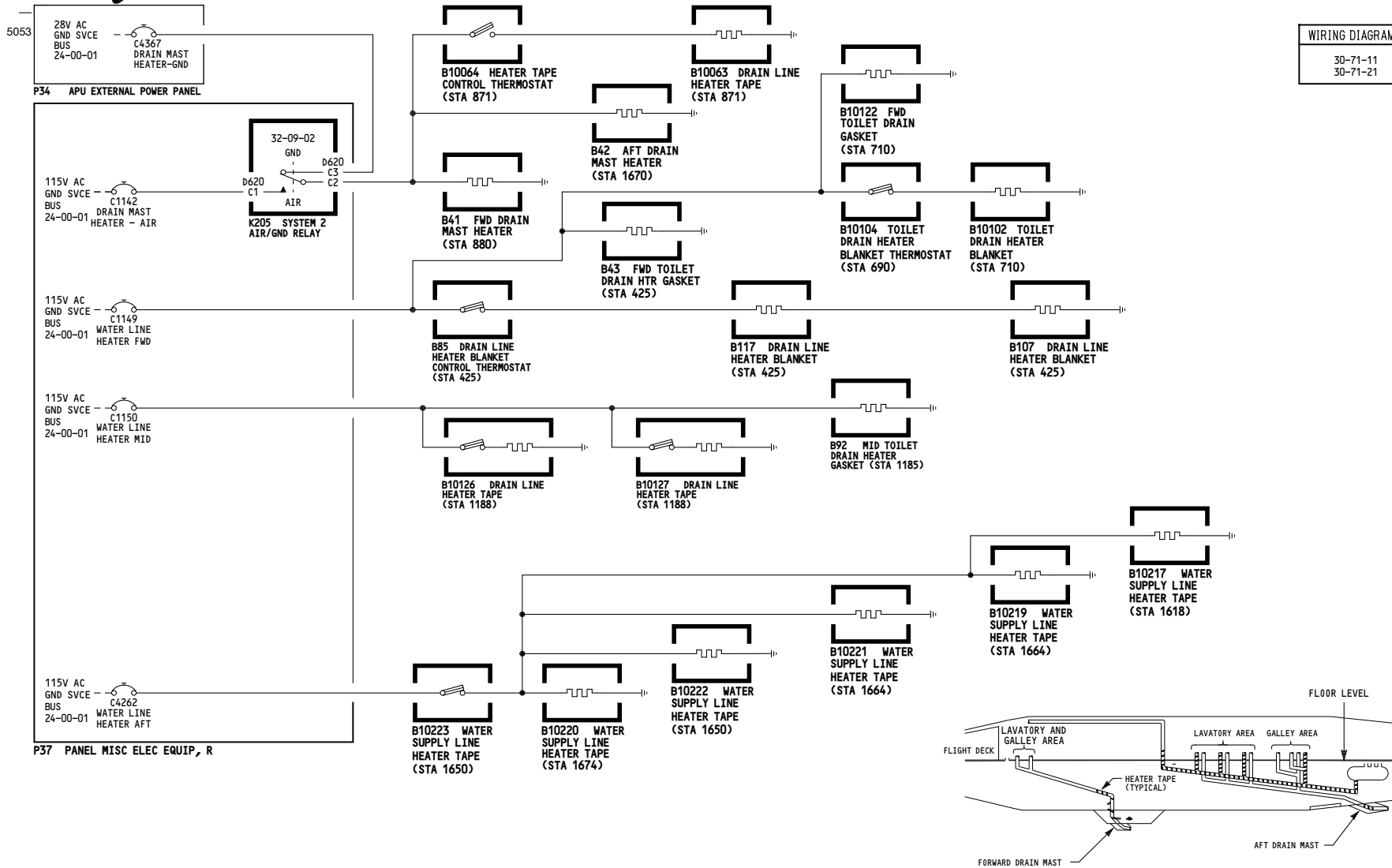
001-011	<b>RAIN REPELLENT SYSTEM</b>
	Incorporates 30-0016
	D280N032S

**30-43-01**

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WIRING DIAGRAMS  
30-71-11  
30-71-21

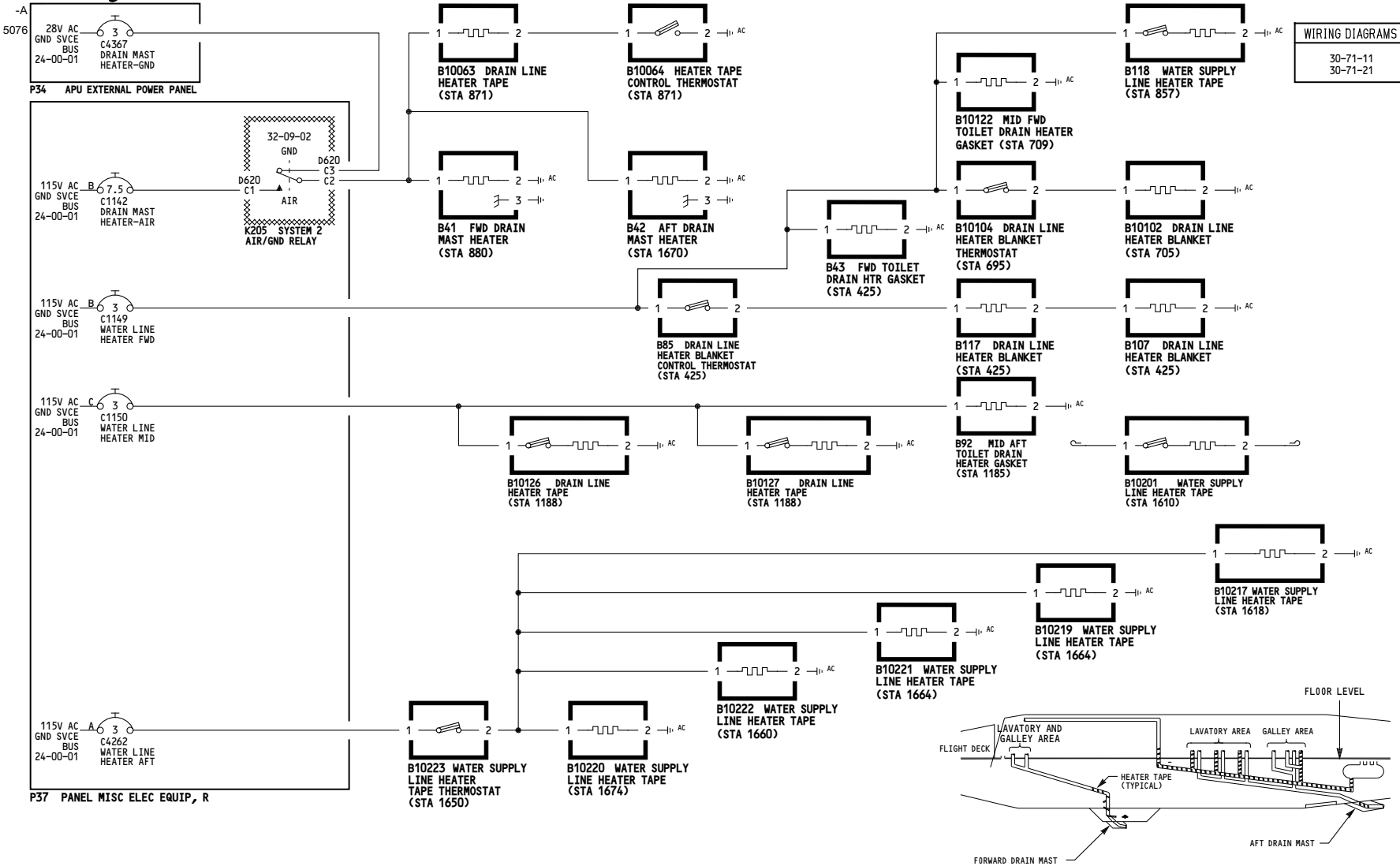


001	<p><b>WATER AND WASTE SYSTEM HEATERS</b></p> <p>D280N032S</p>
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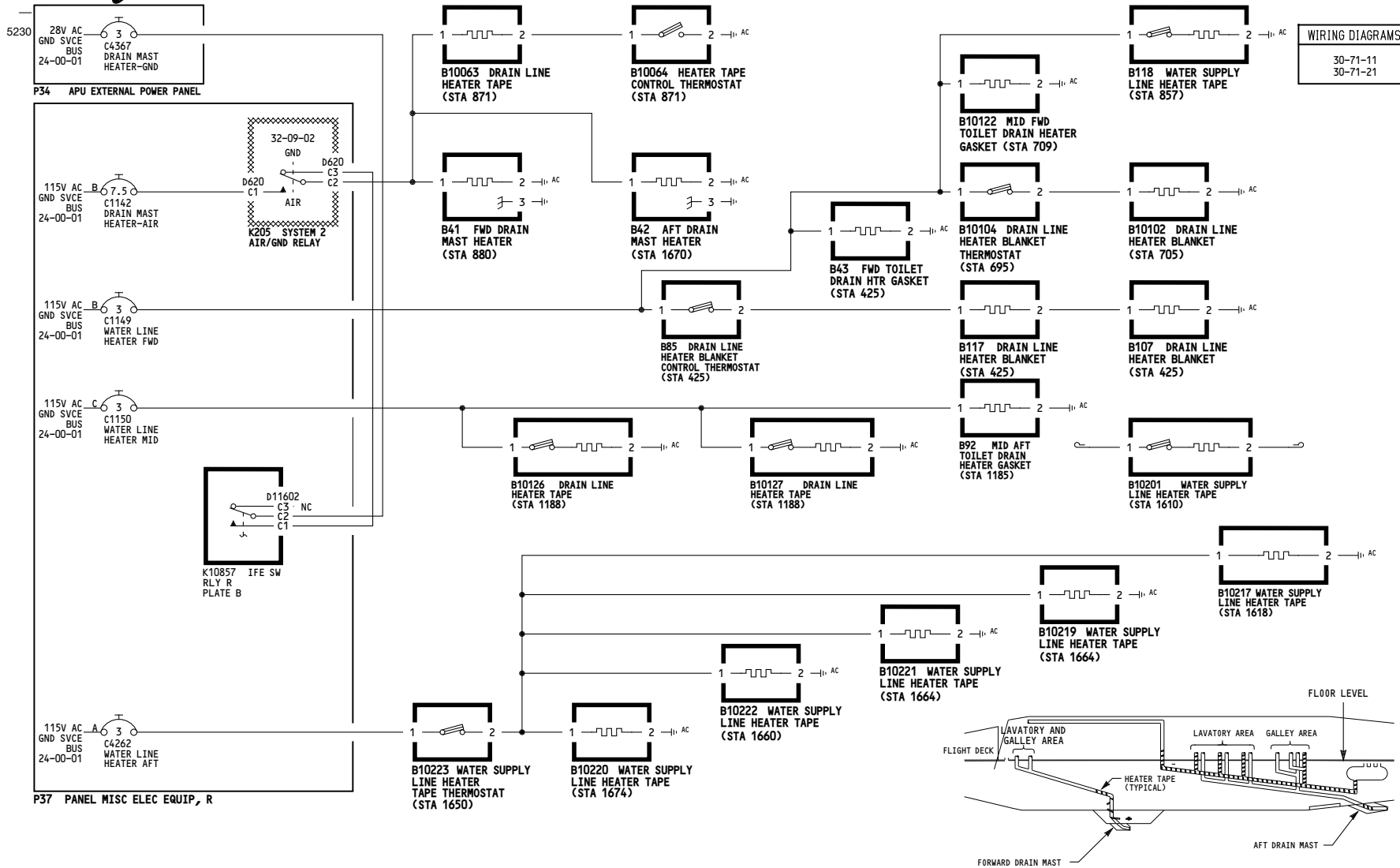


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**WATER AND WASTE SYSTEM HEATERS**

D280N032S

**30-71-01**



WIRING DIAGRAMS  
30-71-11  
30-71-21

003-011

**WATER AND WASTE SYSTEM HEATERS**

Incorporates  
24-0093

D280N032S

**30-71-01**

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