

**CHAPTER**

**29**

**HYDRAULIC POWER**



CHAPTER 29  
HYDRAULIC POWER

CH-SC-SU	Schem	Page	Sheet	Date	CH-SC-SU	Schem	Page	Sheet	Date
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		2		BLANK	29-22-11				
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R		2		Aug 10/2009			101		Feb 09/2009
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29-10-01							101		Feb 09/2009
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A = Added, R = Revised, D = Deleted, O = Overflow

**29-EFFECTIVE PAGES**

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HYDRAULIC POWER

Title	CH-SC-SU	Schem	Page	Sheet	Date	Effectivity
<b><u>HYDRAULIC POWER</u></b>						
HYDRAULIC SYSTEM - SIMPLIFIED	29-00-00		101	1	Oct 20/2005	YC001-YC011
				2	Oct 20/2005	YC001-YC011
			102	1	Feb 09/2009	YC012-YM670
				2	Feb 09/2009	YC012-YM670
<b><u>MAIN HYDRAULIC</u></b>						
HYDRAULIC PUMP CONTROLS	29-10-01		101	1	Jul 17/2007	YC001-YC030
				2	Jul 17/2007	YC001-YC030
			102	1	Feb 09/2009	YC031-YM670
				2	Feb 09/2009	YC031-YM670
<b><u>HYDRAULIC SYSTEMS A AND B</u></b>						
ENGINE HYDRAULIC PUMP CONTROL	29-11-11		101		Mar 31/2005	YC001-YC007
			102		Feb 09/2009	YC008-YM670
ELECTRIC HYDRAULIC PUMP CONTROL	29-11-12		101		May 11/2009	ALL
<b><u>AUXILIARY</u></b>						
AUXILARY HYDRAULIC CONTROL	29-20-01		101		Jul 17/2007	YC001-YC030
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<b><u>HYDRAULIC STANDBY CONTROL</u></b>						
STANDBY HYDRAULIC PUMP CONTROL	29-22-11		101		Feb 09/2009	ALL
<b><u>LANDING GEAR TRANSFER VALVE CONTROL</u></b>						
LANDING GEAR TRANSFER VALVE CONTROL	29-23-11		101		Feb 09/2009	ALL
<b><u>HYDRAULIC POWER TRANSFER UNIT CONTROL</u></b>						
HYDRAULIC POWER TRANSFER UNIT CONTROL	29-25-11		101		May 11/2009	YC001-YC007



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HYDRAULIC POWER

Title	CH-SC-SU	Schem	Page	Sheet	Date	Effectivity
HYDRAULIC POWER TRANSFER UNIT CONTROL (cont.)	29-25-11		102		May 11/2009	YC008-YK906
			103		May 11/2009	YK907-YK912 YK918-YK919 YL401-YL429
			104		May 11/2009	YM643-YM652
<b><u>HYDRAULIC FLUID QUANTITY INDICATING SYSTEM</u></b>						
HYDRAULIC FLUID QUANTITY INDICATION	29-31-11		101		Feb 09/2009	ALL
<b><u>HYDRAULIC FLUID INDICATING SYSTEM</u></b>						
HYDRAULIC FLUID PRESSURE INDICATION	29-32-11		101		Feb 09/2009	ALL
<b><u>PUMP LOW PRESSURE WARNING SYSTEM</u></b>						
HYDRAULIC SYSTEM LOW PRESSURE LIGHTS	29-33-11		101		Feb 09/2009	ALL
<b><u>HYDRAULIC FLUID OVERHEAT WARNING SYSTEM</u></b>						
MAIN HYDRAULIC SYSTEM OVERHEAT LIGHTS	29-34-11		101		Feb 09/2009	ALL
<b><u>HYDRAULIC PRESSURE INDICATION SYSTEM</u></b>						
STANDBY HYDRAULIC SYSTEM LOW PRESSURE LIGHTS	29-35-11		101		Jul 17/2007	YC001-YC030
			101.1		Aug 13/2008	YC001-YC030
			102		Aug 10/2009	YC031-YM670

**CHAPTER 29  
HYDRAULIC POWER**

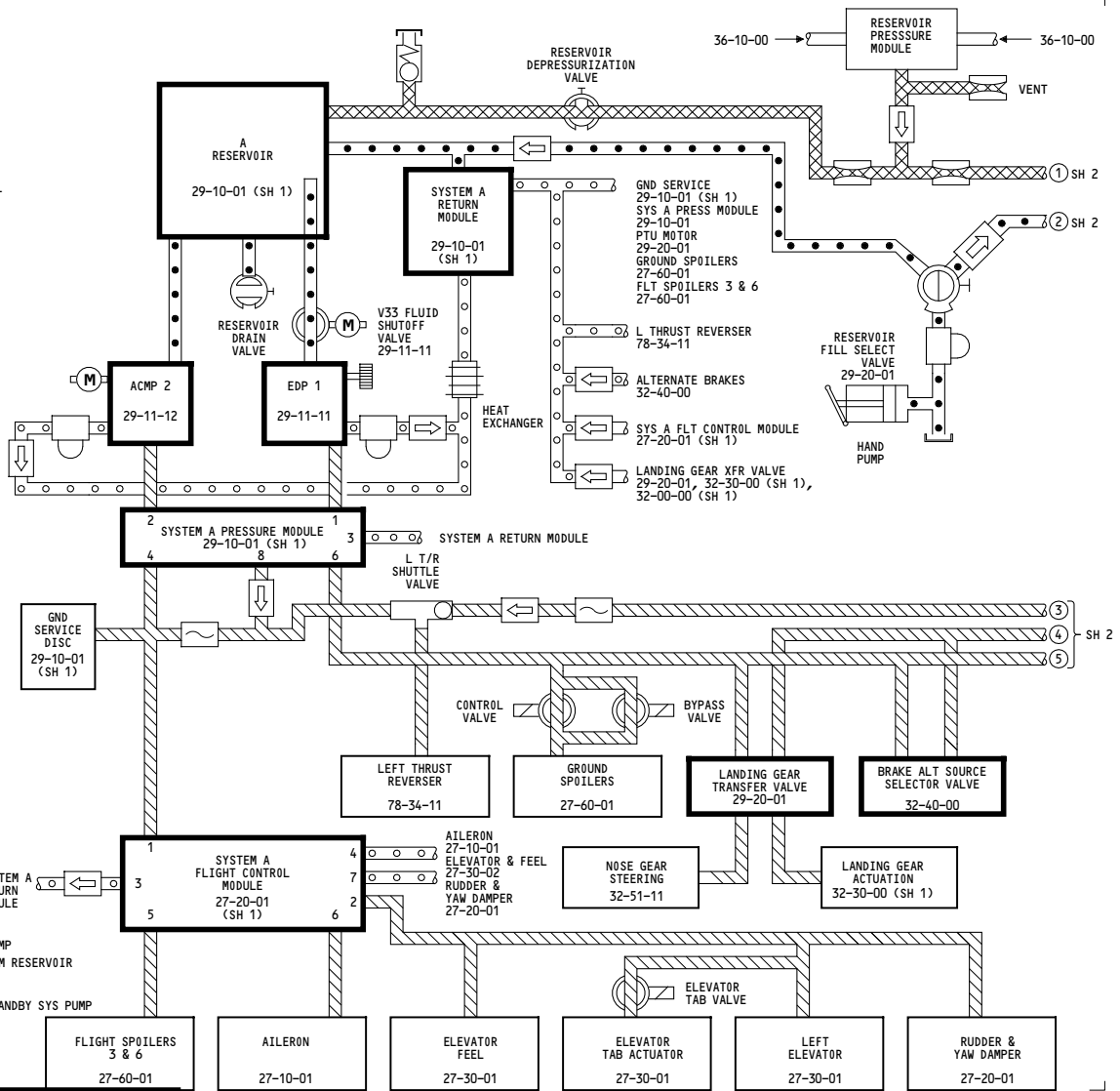
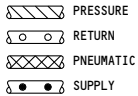
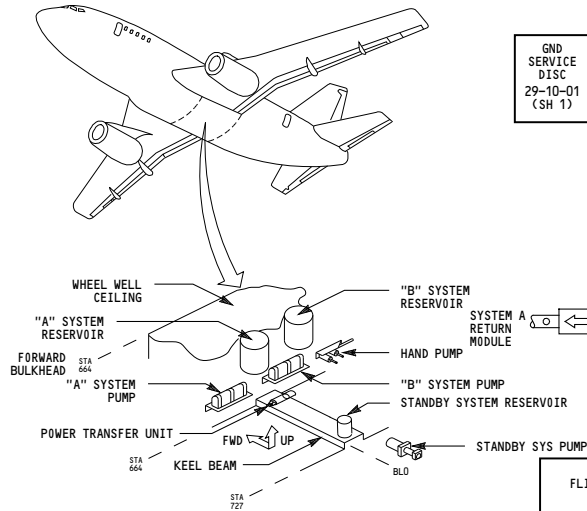
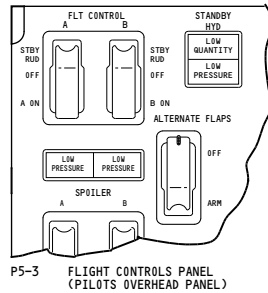
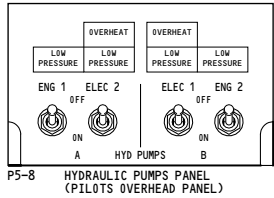
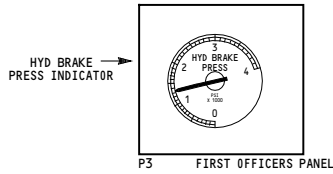
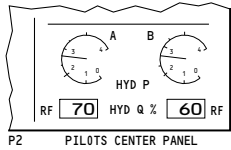
CH-SC-SU	Title
29-20-01	AUXILARY HYDRAULIC CONTROL
29-11-12	ELECTRIC HYDRAULIC PUMP CONTROL
29-11-11	ENGINE HYDRAULIC PUMP CONTROL
29-32-11	HYDRAULIC FLUID PRESSURE INDICATION
29-31-11	HYDRAULIC FLUID QUANTITY INDICATION
29-25-11	HYDRAULIC POWER TRANSFER UNIT CONTROL
29-10-01	HYDRAULIC PUMP CONTROLS
29-00-00	HYDRAULIC SYSTEM - SIMPLIFIED
29-33-11	HYDRAULIC SYSTEM LOW PRESSURE LIGHTS
29-23-11	LANDING GEAR TRANSFER VALVE CONTROL
29-34-11	MAIN HYDRAULIC SYSTEM OVERHEAT LIGHTS
29-22-11	STANDBY HYDRAULIC PUMP CONTROL
29-35-11	STANDBY HYDRAULIC SYSTEM LOW PRESSURE LIGHTS

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

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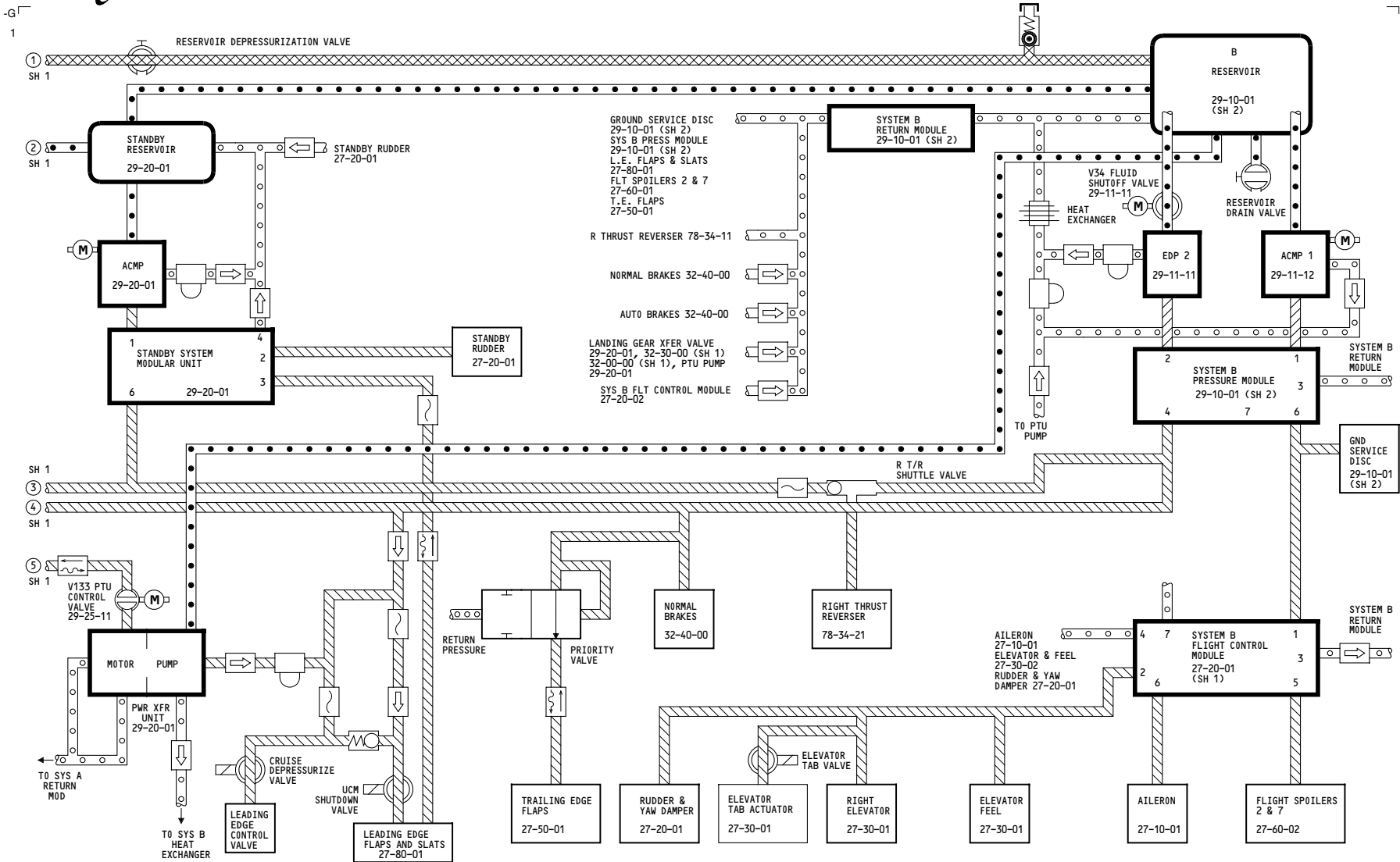


YC001-YC011

**HYDRAULIC SYSTEM - SIMPLIFIED**

D280A203

**29-00-00**

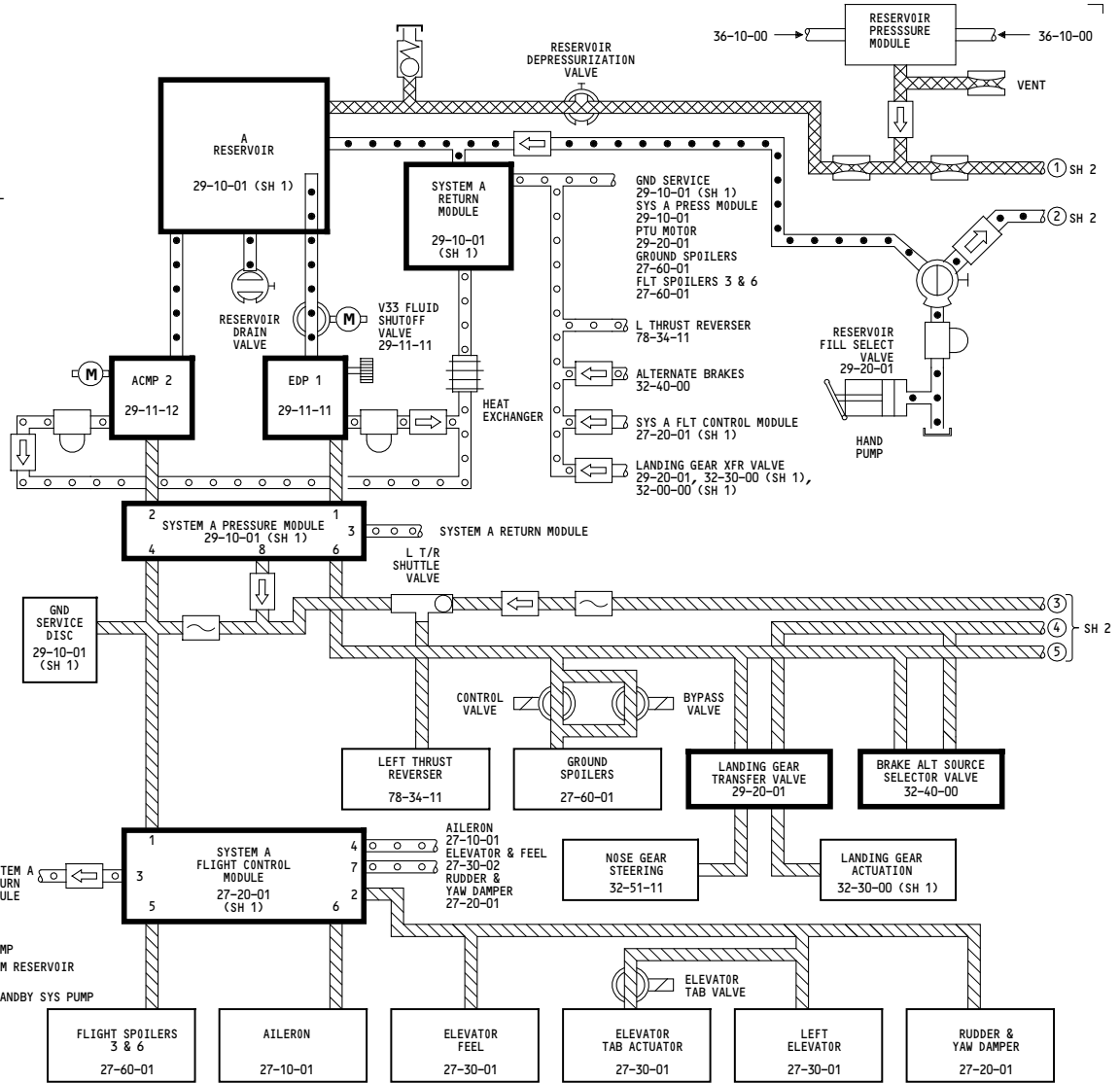
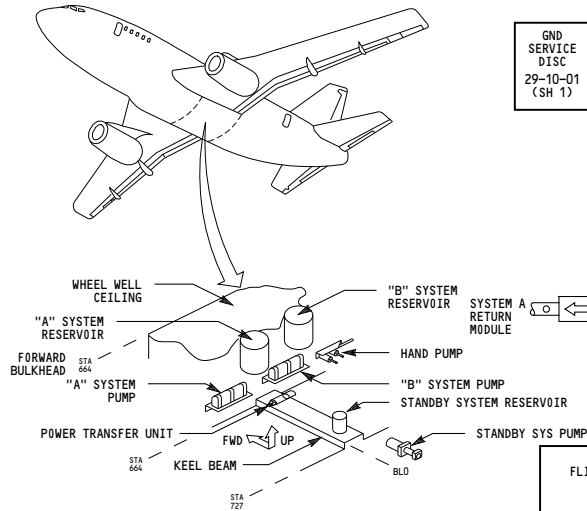
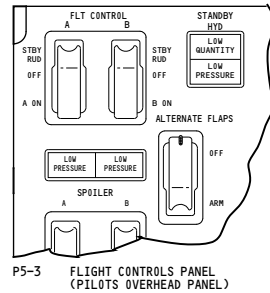
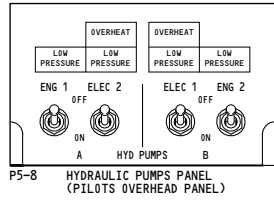
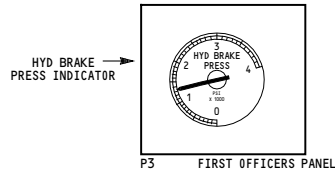
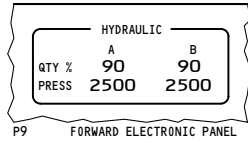


<p>YC001-YC011</p>	<p><b>HYDRAULIC SYSTEM - SIMPLIFIED</b></p> <p>D280A203</p>
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**29-00-00**



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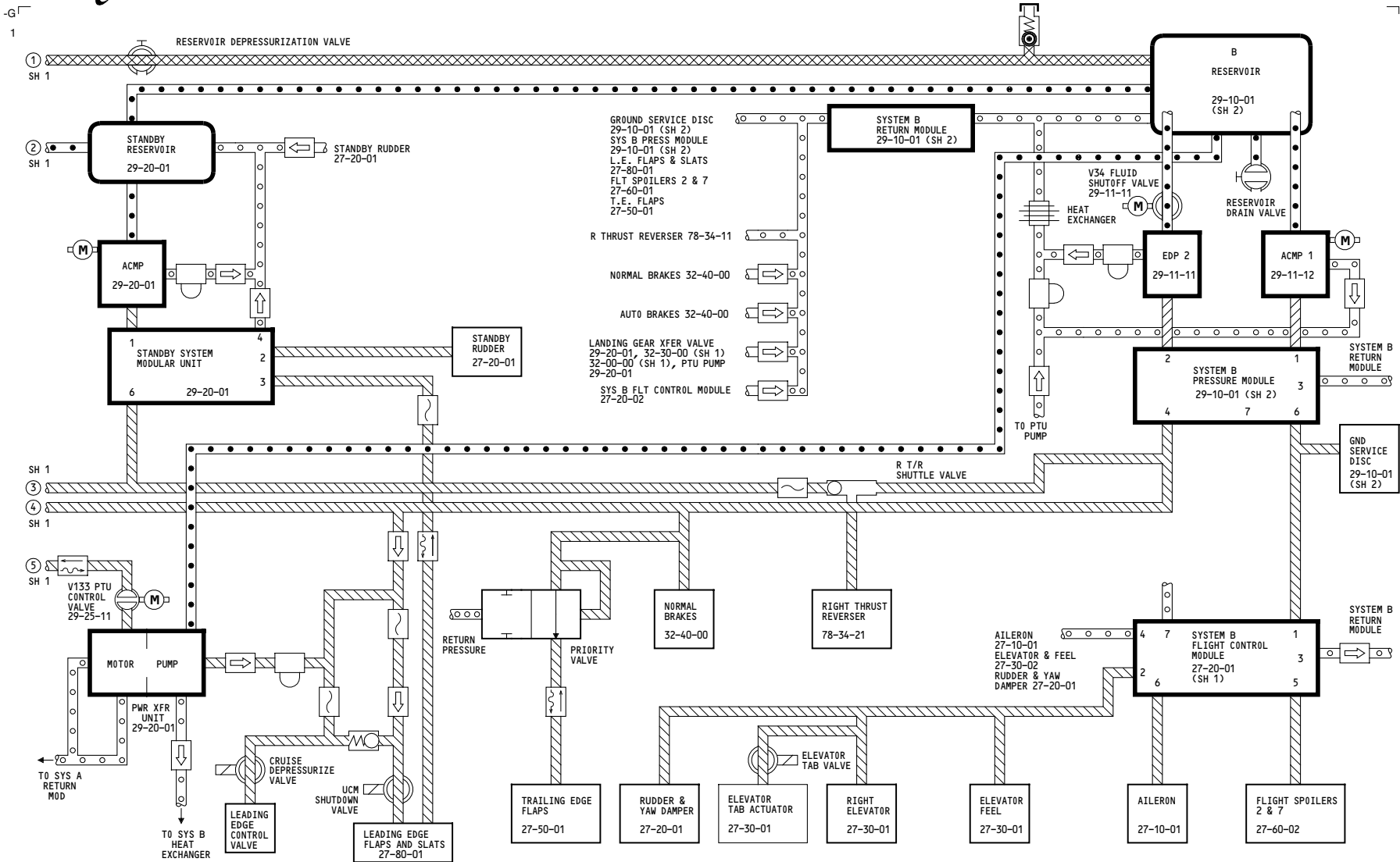


YC012-YM670

**HYDRAULIC SYSTEM - SIMPLIFIED**

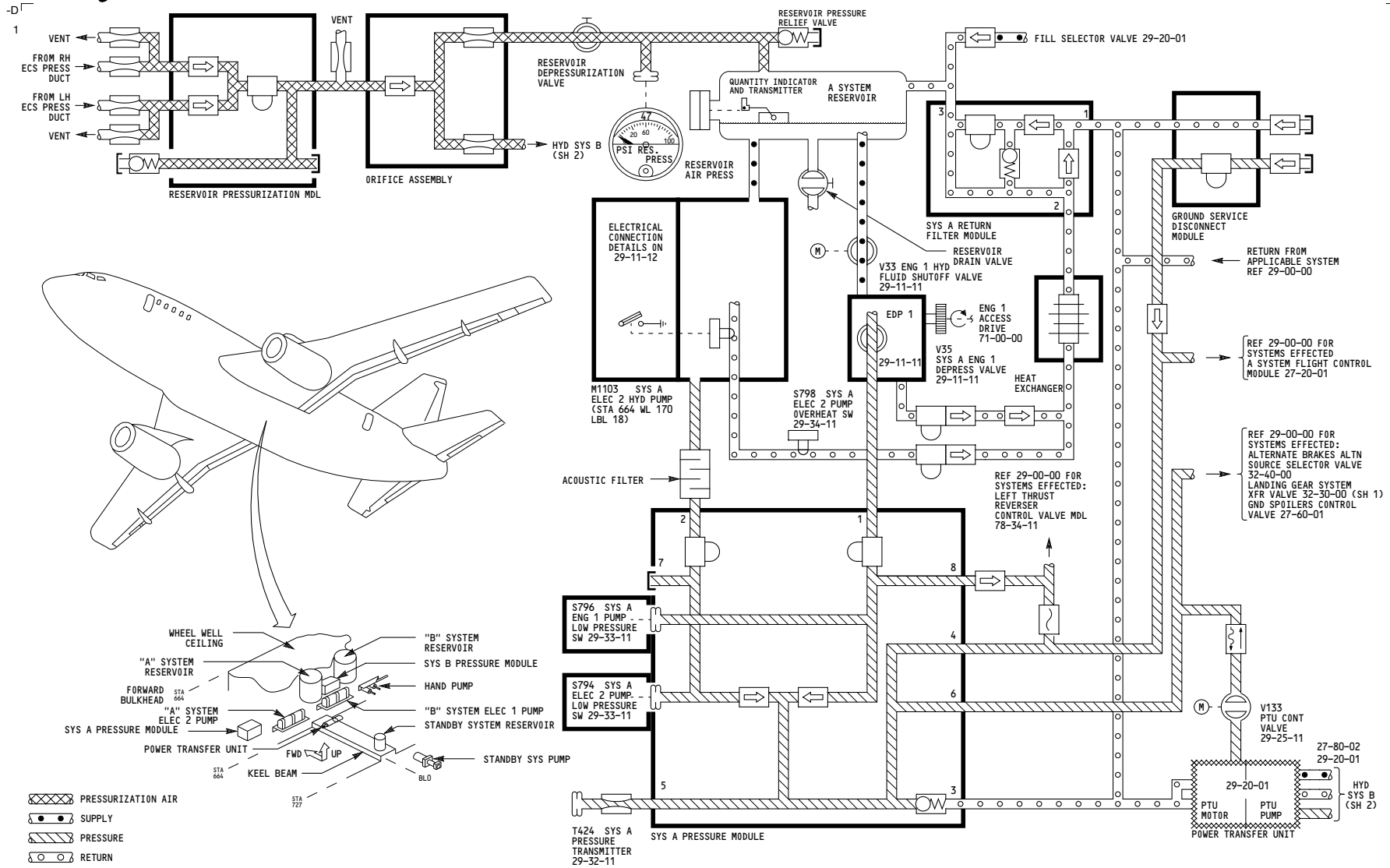
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**29-00-00**



<p>YC012-YM670</p>	<p><b>HYDRAULIC SYSTEM - SIMPLIFIED</b></p> <p>D280A203</p>
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**29-00-00**



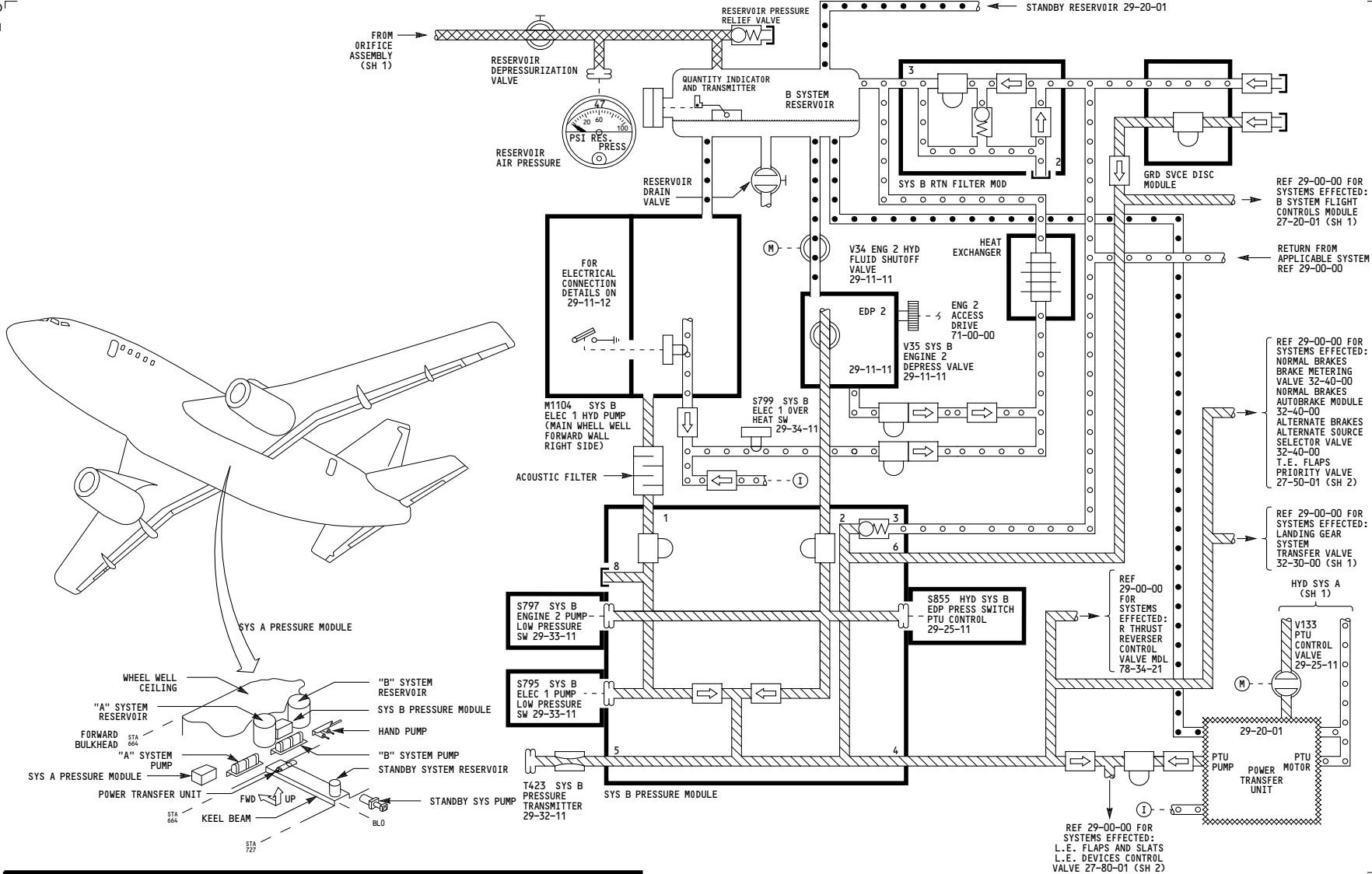
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**HYDRAULIC PUMP CONTROLS**

D280A203

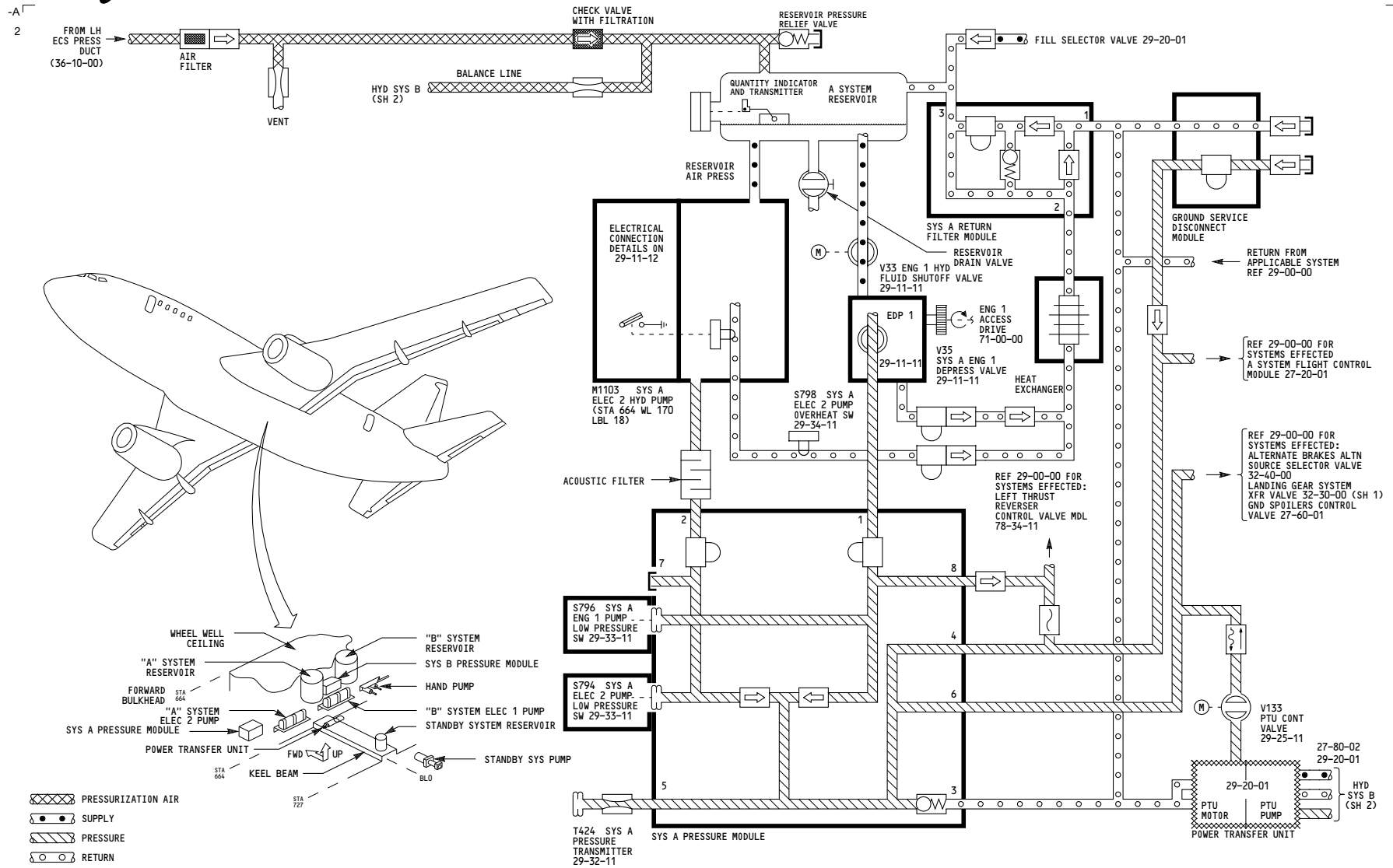
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<p>YC001-YC030</p>	<p><b>HYDRAULIC PUMP CONTROLS</b></p> <p>D280A203</p>
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**29-10-01**



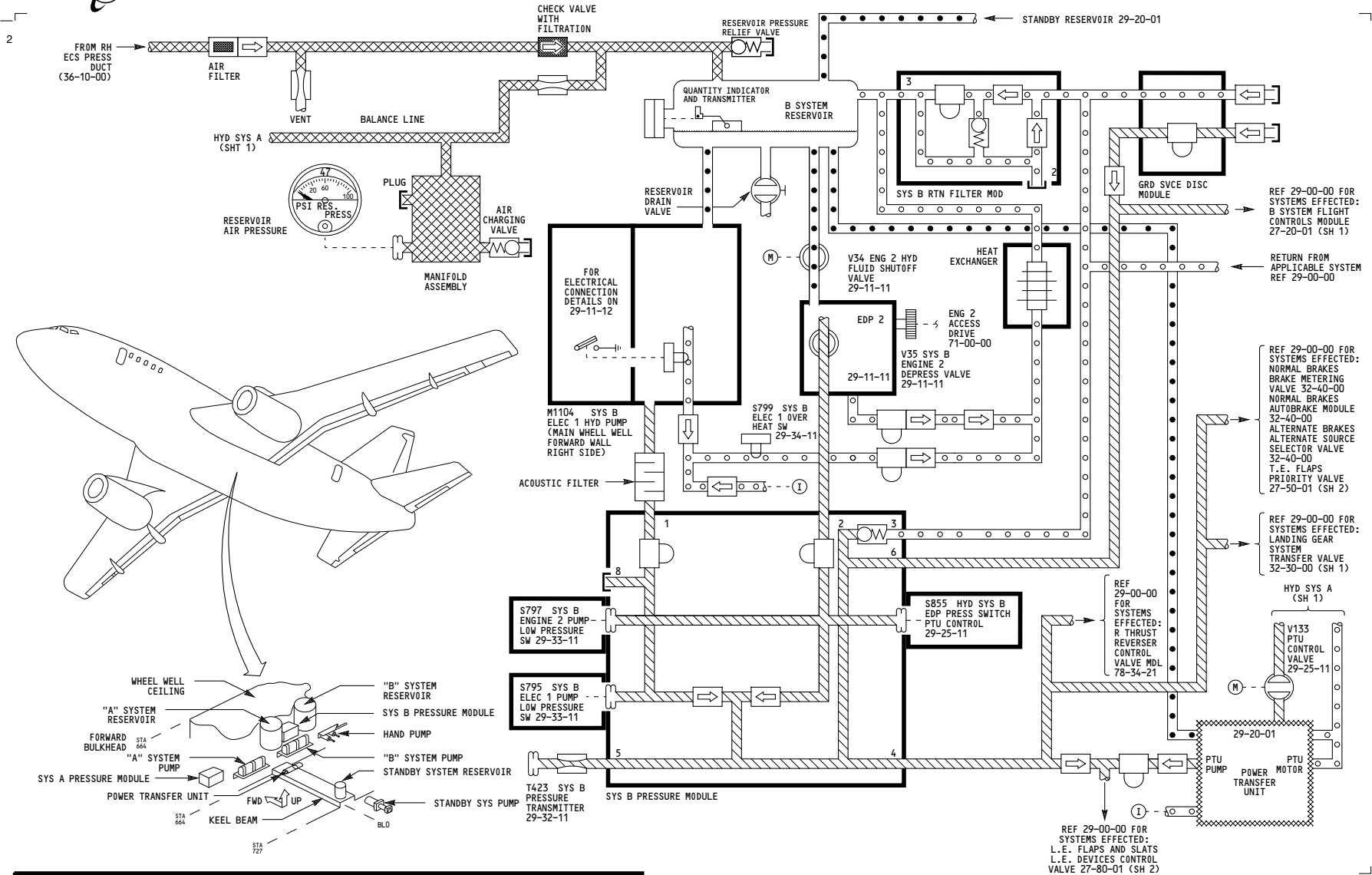
YC031-YM670

HYDRAULIC PUMP CONTROLS

D280A203

29-10-01

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Sheet 1  
Feb 09/2009



YC031-YM670

**HYDRAULIC PUMP CONTROLS**

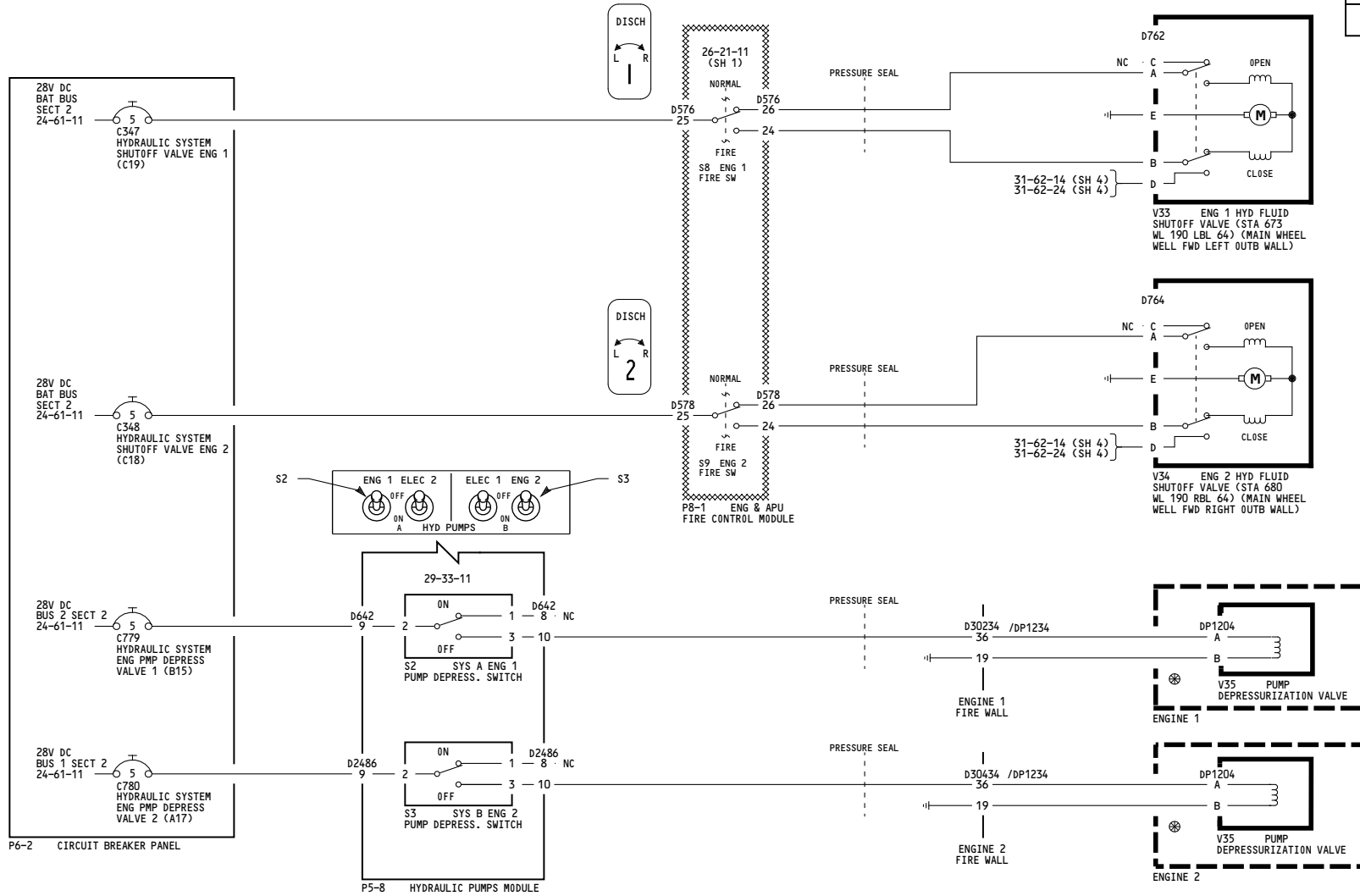
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**29-10-01**

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Sheet 2  
Feb 09/2009

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WIRING DIAGRAMS  
29-11-11



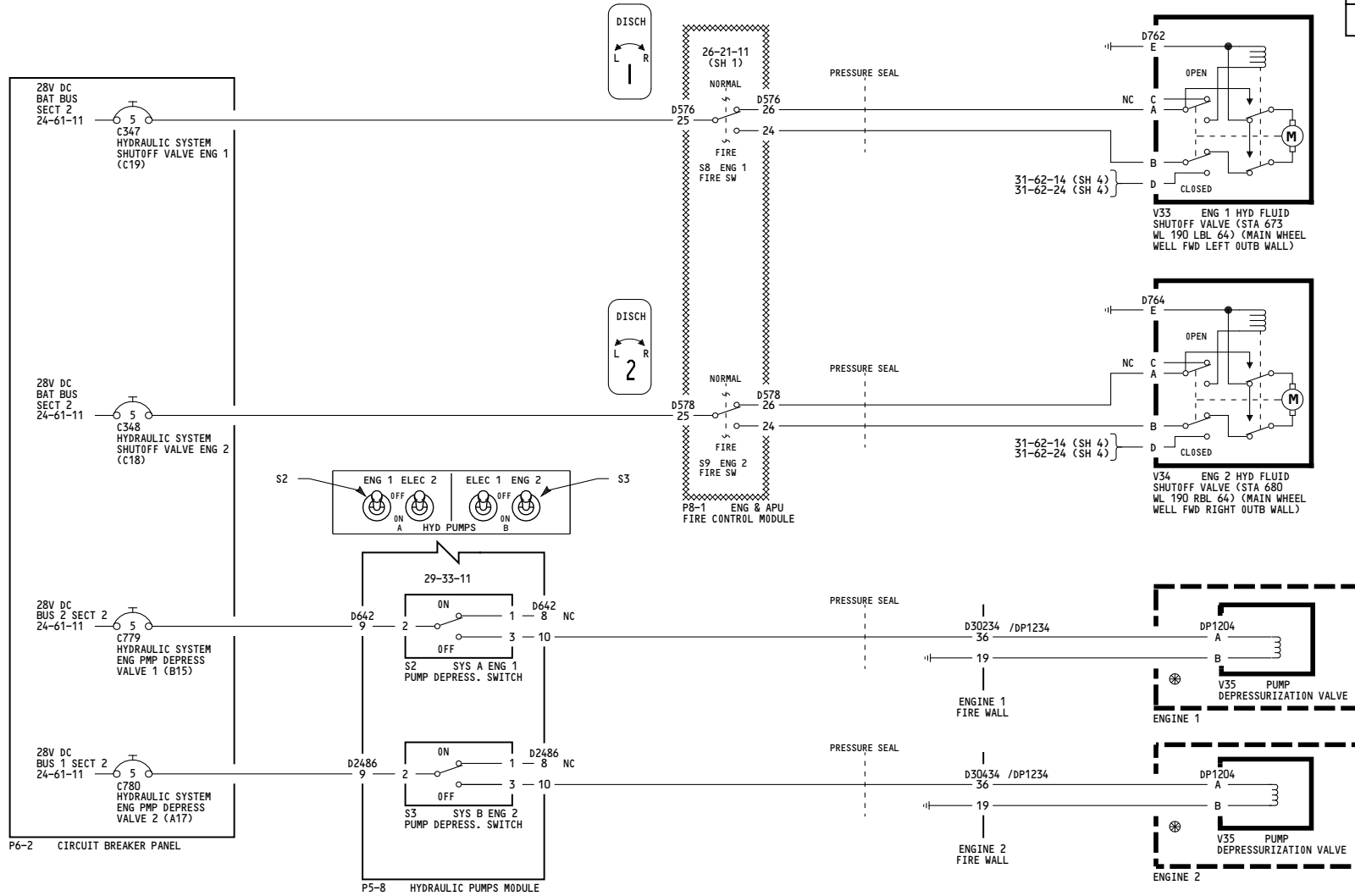
<p>YC001-YC007</p>	<p><b>ENGINE HYDRAULIC PUMP CONTROL</b></p> <p>D280A203</p>
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Mar 31/2005

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2



<p>YC008-YM670</p>	<p><b>ENGINE HYDRAULIC PUMP CONTROL</b></p> <p>D280A203</p>
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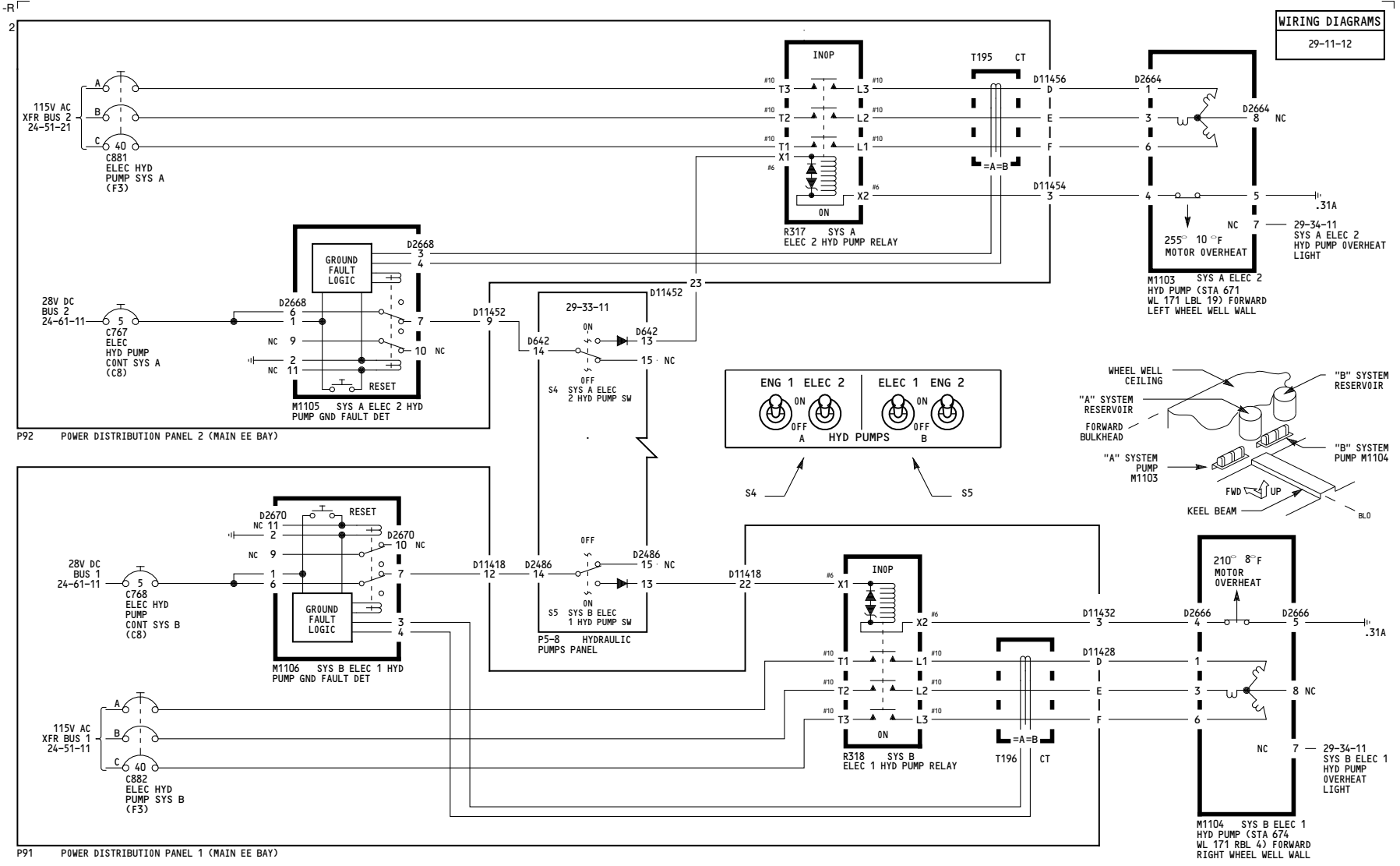
**29-11-11**

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WIRING DIAGRAMS  
29-11-12

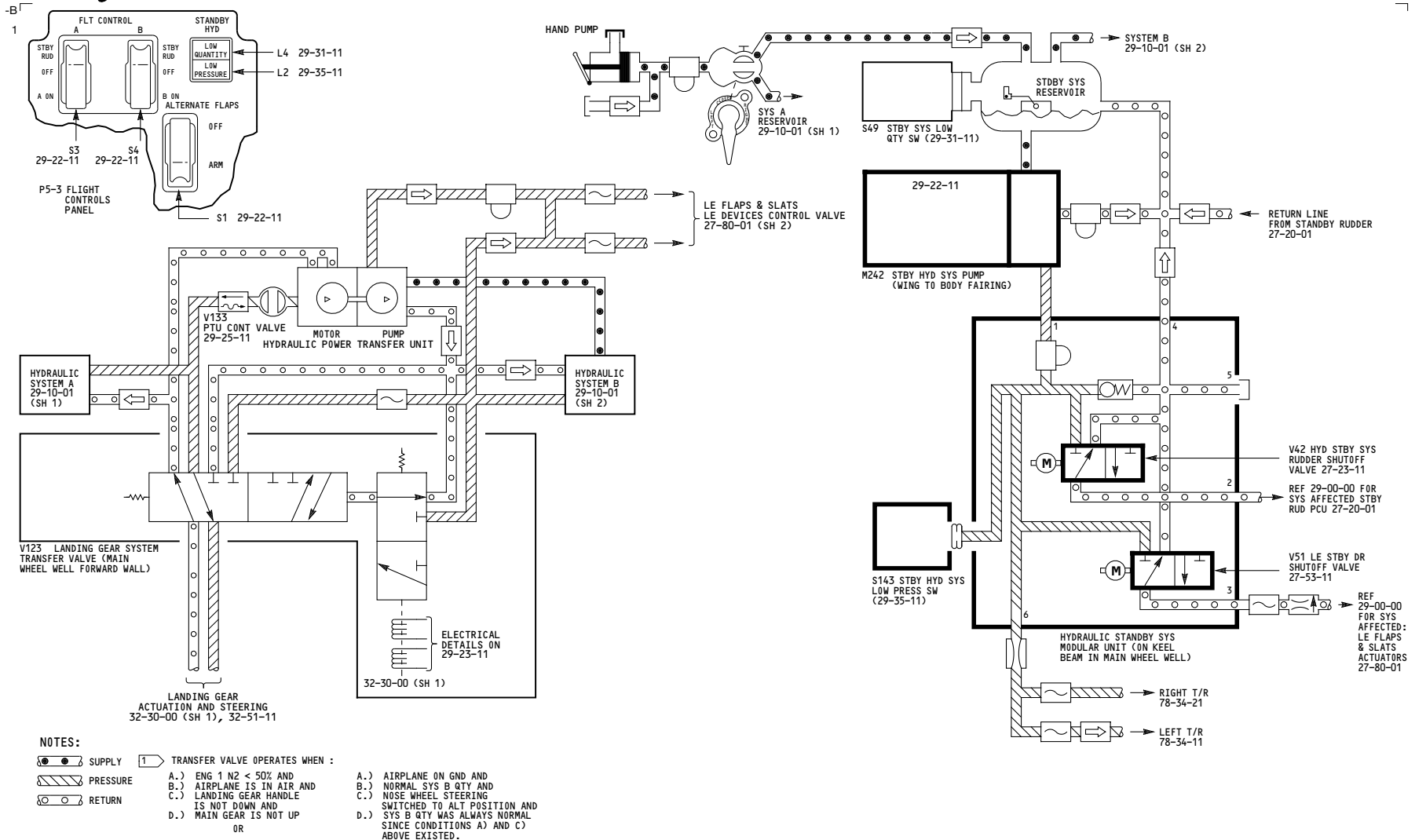


ALL	<p><b>ELECTRIC HYDRAULIC PUMP CONTROL</b></p> <p>D280A203</p>
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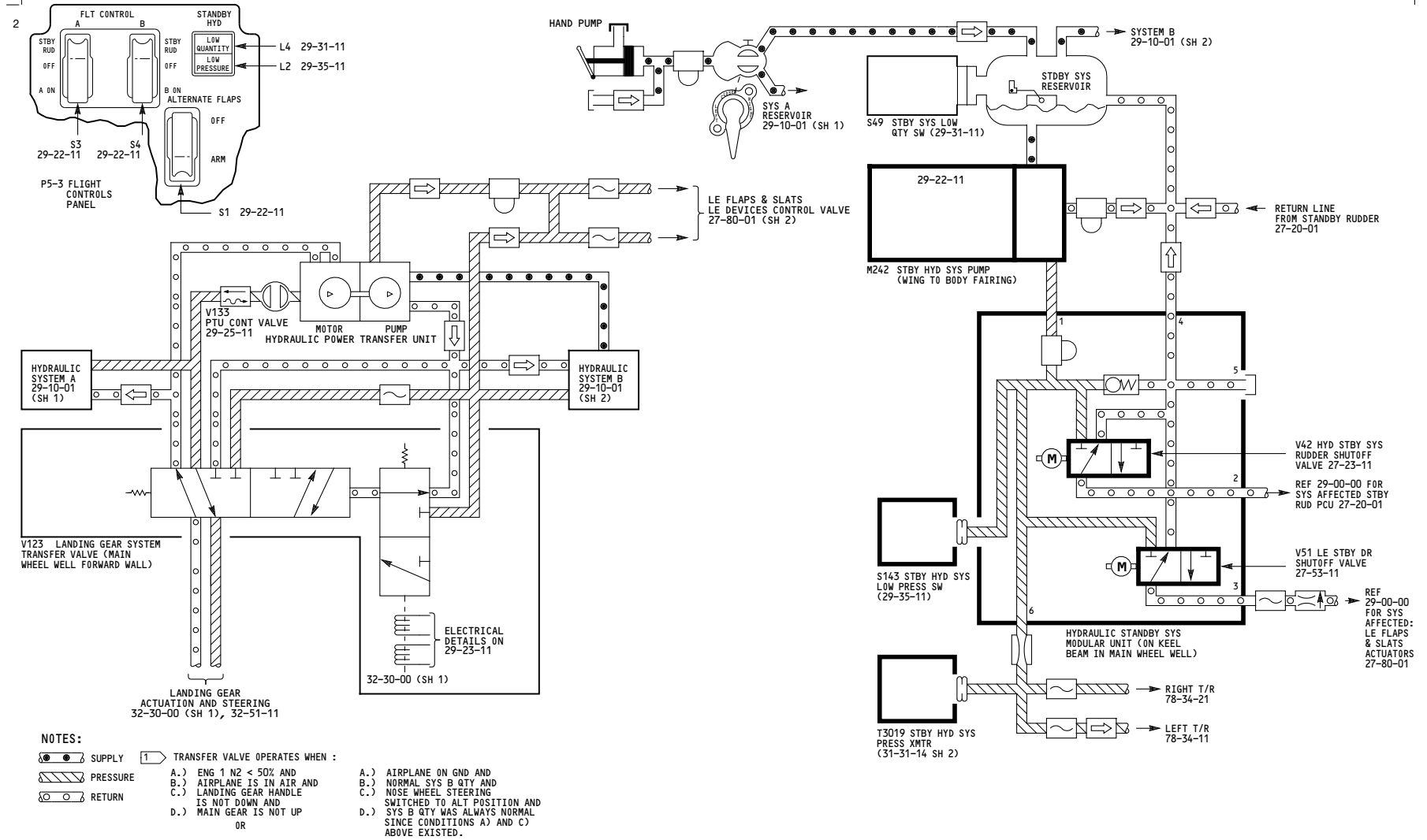
**29-11-12**

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YC001-YC030	<b>AUXILIARY HYDRAULIC CONTROL</b>
	D280A203



YC031-YM670	<b>AUXILIARY HYDRAULIC CONTROL</b>
D280A203	

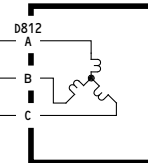
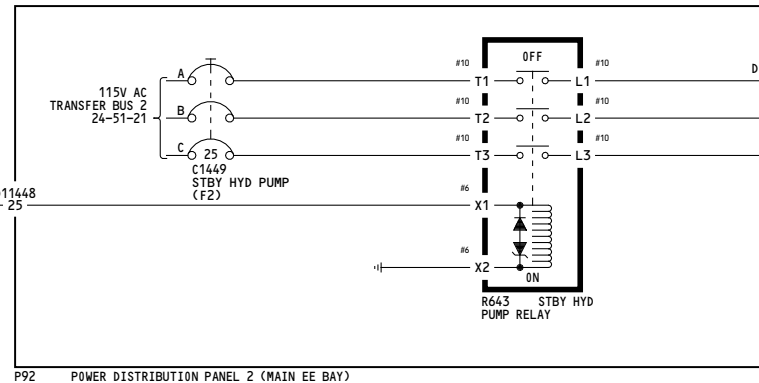
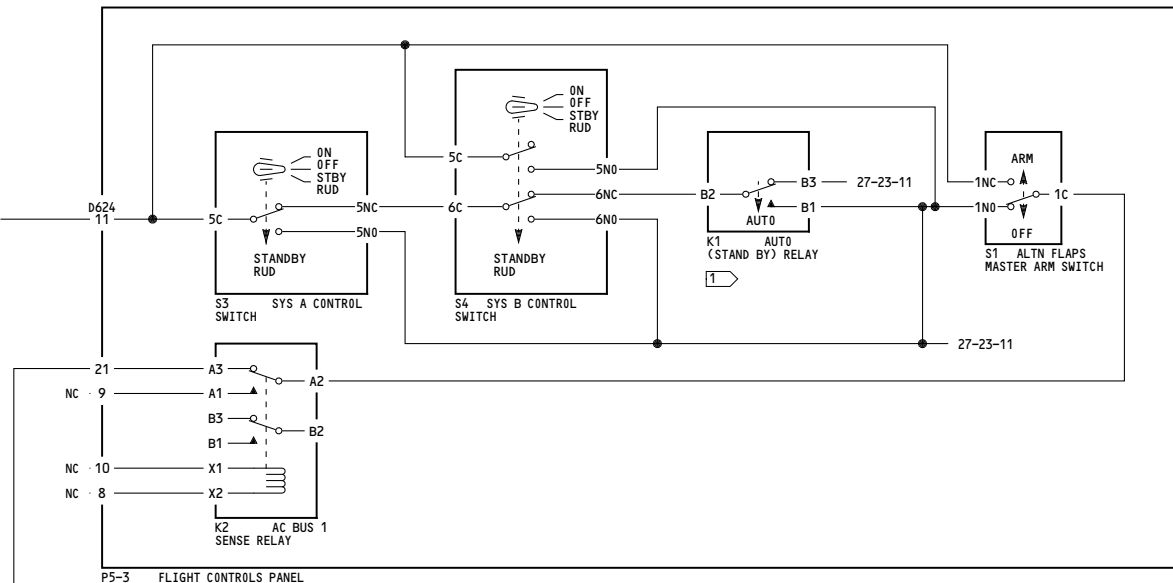
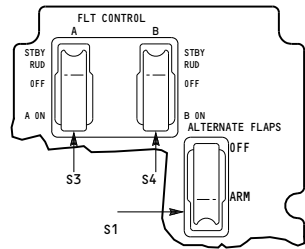
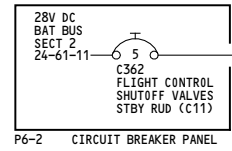
**29-20-01**

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1

**WIRING DIAGRAMS**  
29-22-11



**NOTES**

- 1 AUTO STANDBY RELAY ENERGIZED WHEN (A) OR (B) OCCURS
- (A) FLAPS NOT UP, AND 1) AND 2) BELOW
- 1) AIRPLANE IN AIR OR WHEEL SPEED >60 KTS
- 2) FLT CONT SYS A OR SYS B PRESSURE <1200 PSI
- (B) MAIN RUDDER PCU FORCE FIGHT MONITOR TRIPS (FORCE FIGHT>3600PSID)

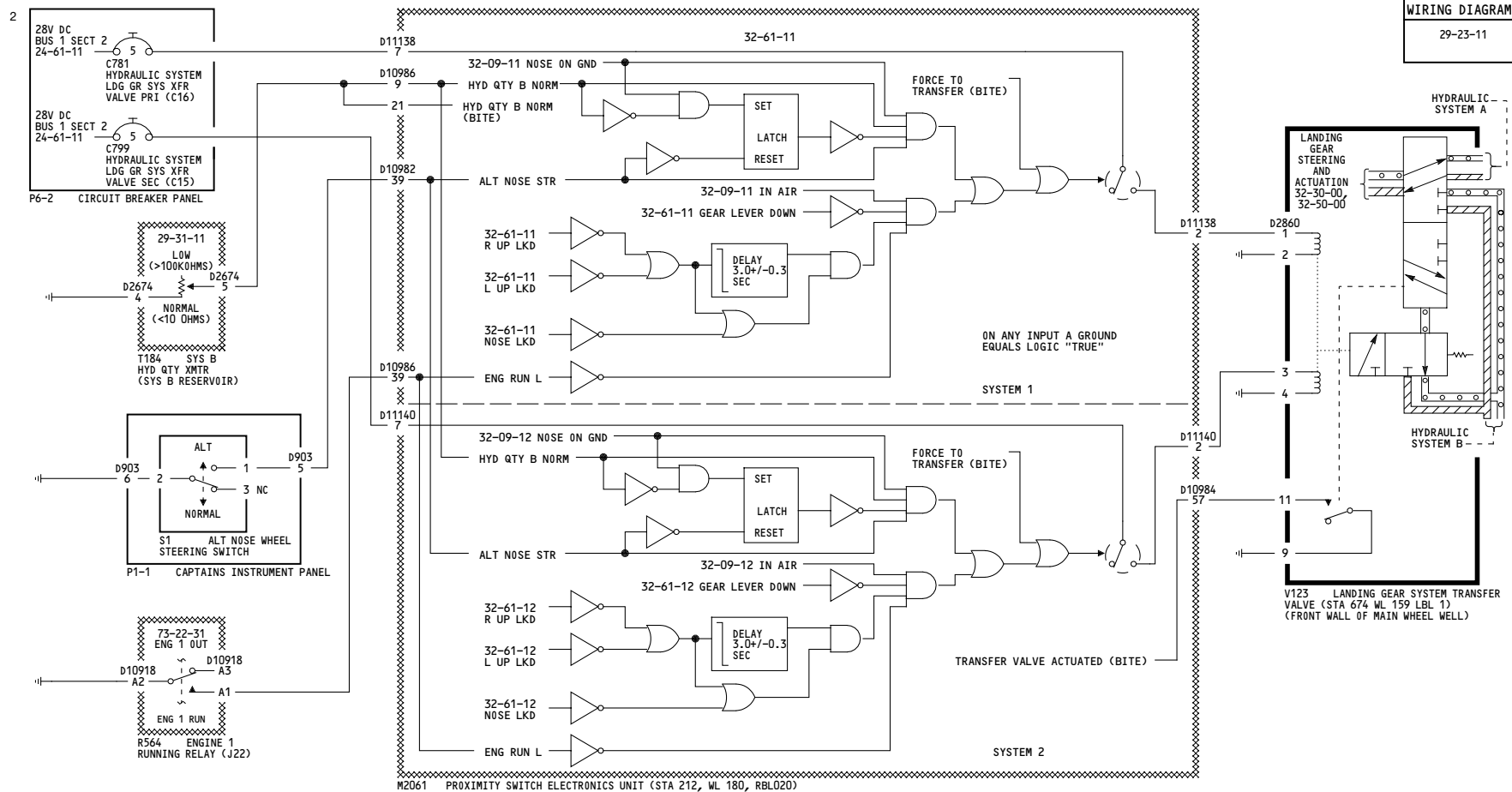
ALL	<b>STANDBY HYDRAULIC PUMP CONTROL</b>
	D280A203

**29-22-11**

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WIRING DIAGRAMS  
29-23-11



- NOTES:**
- 1. TRANSFER VALVE OPERATION  
TRANSFER VALVE OPERATES WHEN:
    - A.) ENG 1 N2 < 50% AND
    - B.) AIRPLANE IS IN AIR AND
    - C.) LANDING GEAR HANDLE IS NOT DOWN AND
    - D.) MAIN GEAR IS NOT UP
  - 2. LATCH OF SYS B LOW LEVEL SWITCH  
TO PREVENT TOGGLING OF THE TRANSFER VALVE WHEN ALT NOSE WHEEL STEERING IS SELECTED AND THE B SYS QTY THEN DROPS BELOW THE SWITCH SET POINT MOMENTARILY.
    - A.) SET LOW LEVEL LATCH WHEN SYS B QTY IS NOT NORMAL AND A/P IS ON GROUND.
    - B.) RESET LOW LEVEL LATCH WHEN ALT NOSE WHEEL STEERING IS NOT SELECTED.
- A.) BITE TEST

PRESSURE  
RETURN

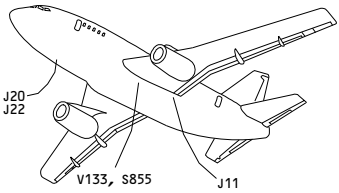
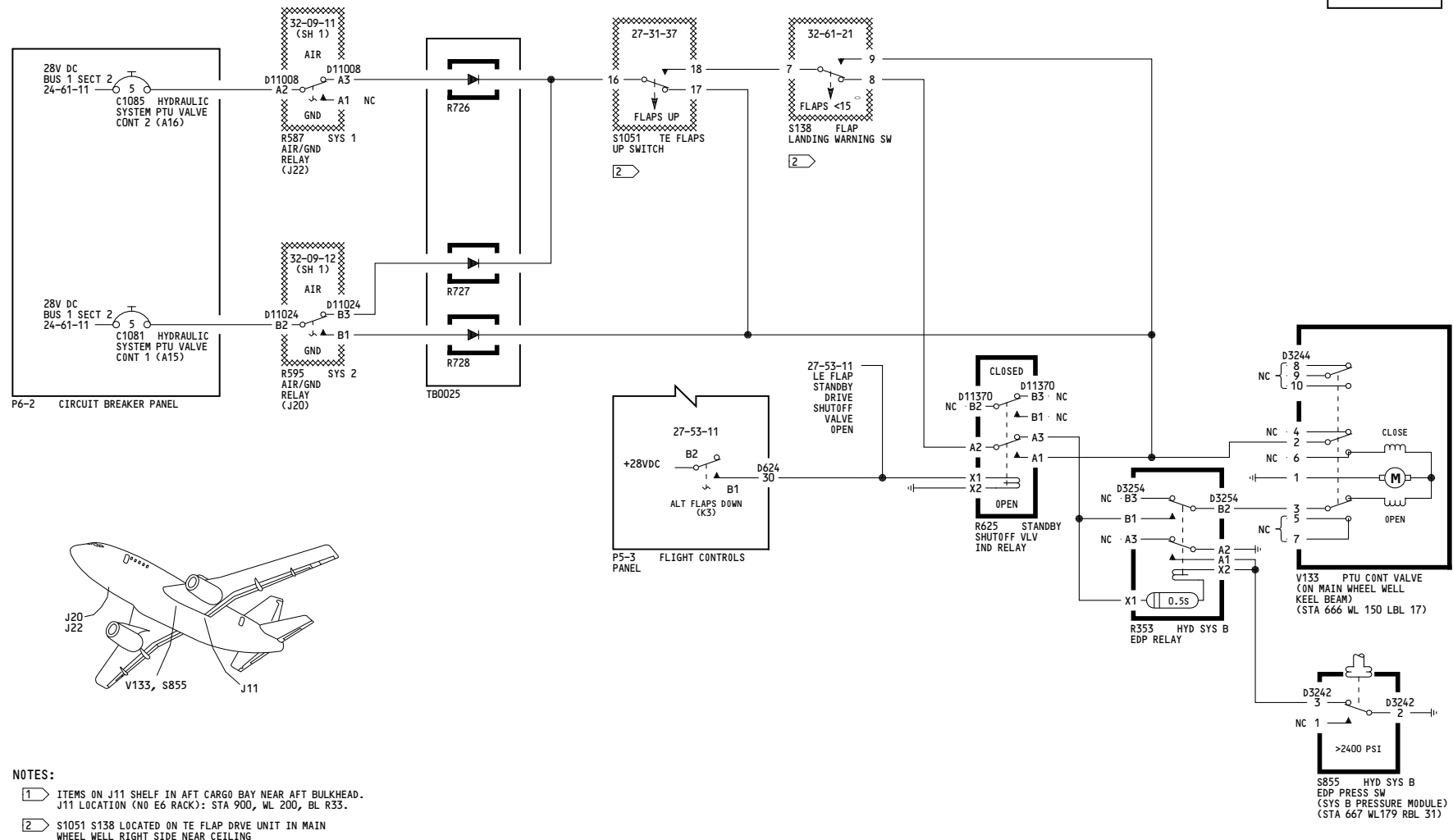
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D280A203	

**29-23-11**

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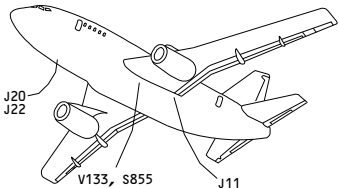
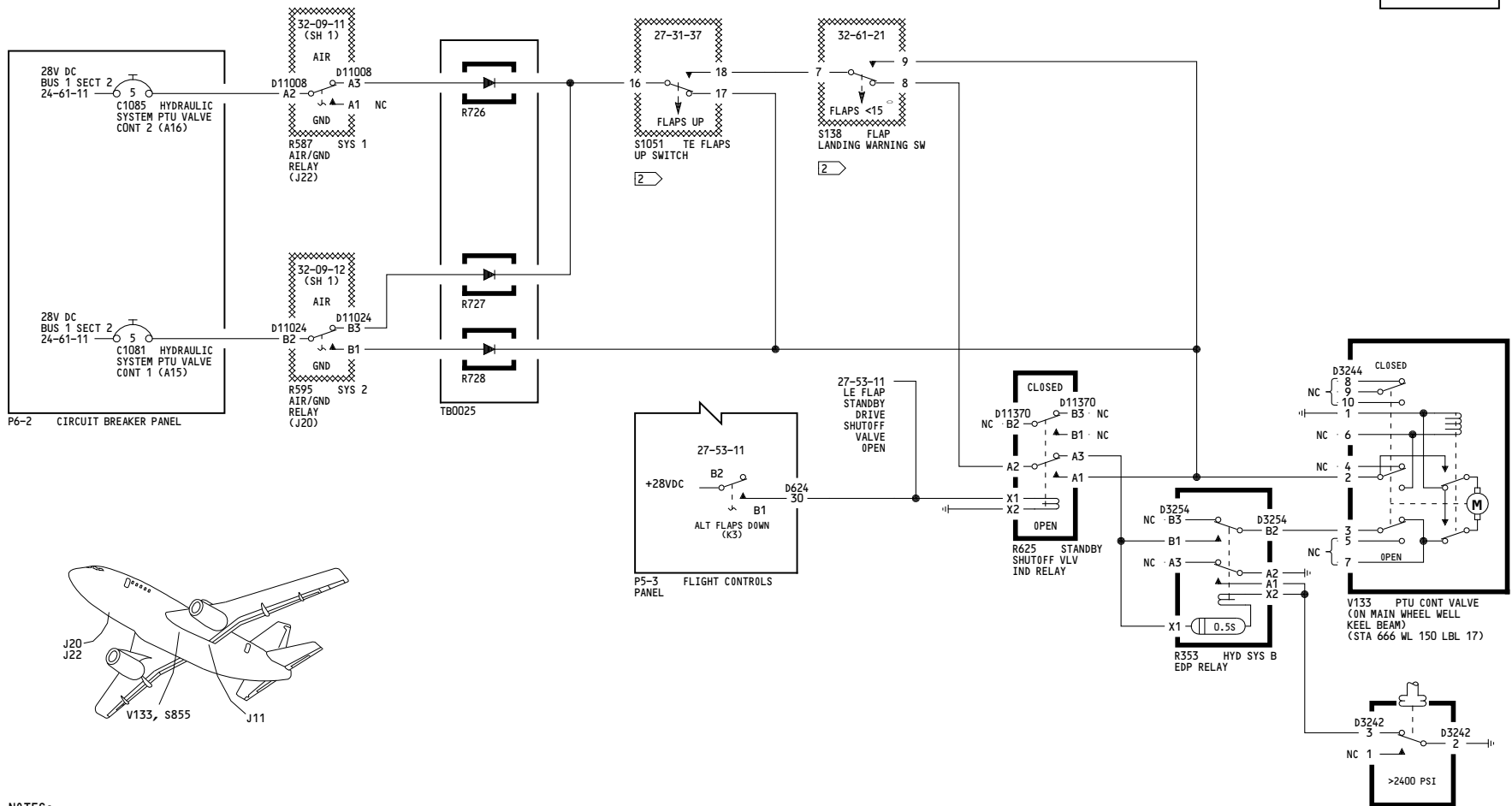
3



- NOTES:**
- 1 ITEMS ON J11 SHELF IN AFT CARGO BAY NEAR AFT BULKHEAD. J11 LOCATION (NO E6 RACK): STA 900, WL 200, BL R33.
  - 2 S1051 S138 LOCATED ON TE FLAP DRIVE UNIT IN MAIN WHEEL WELL RIGHT SIDE NEAR CEILING

YC001-YC007	<b>HYDRAULIC POWER TRANSFER UNIT CONTROL</b>
D280A203	

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1

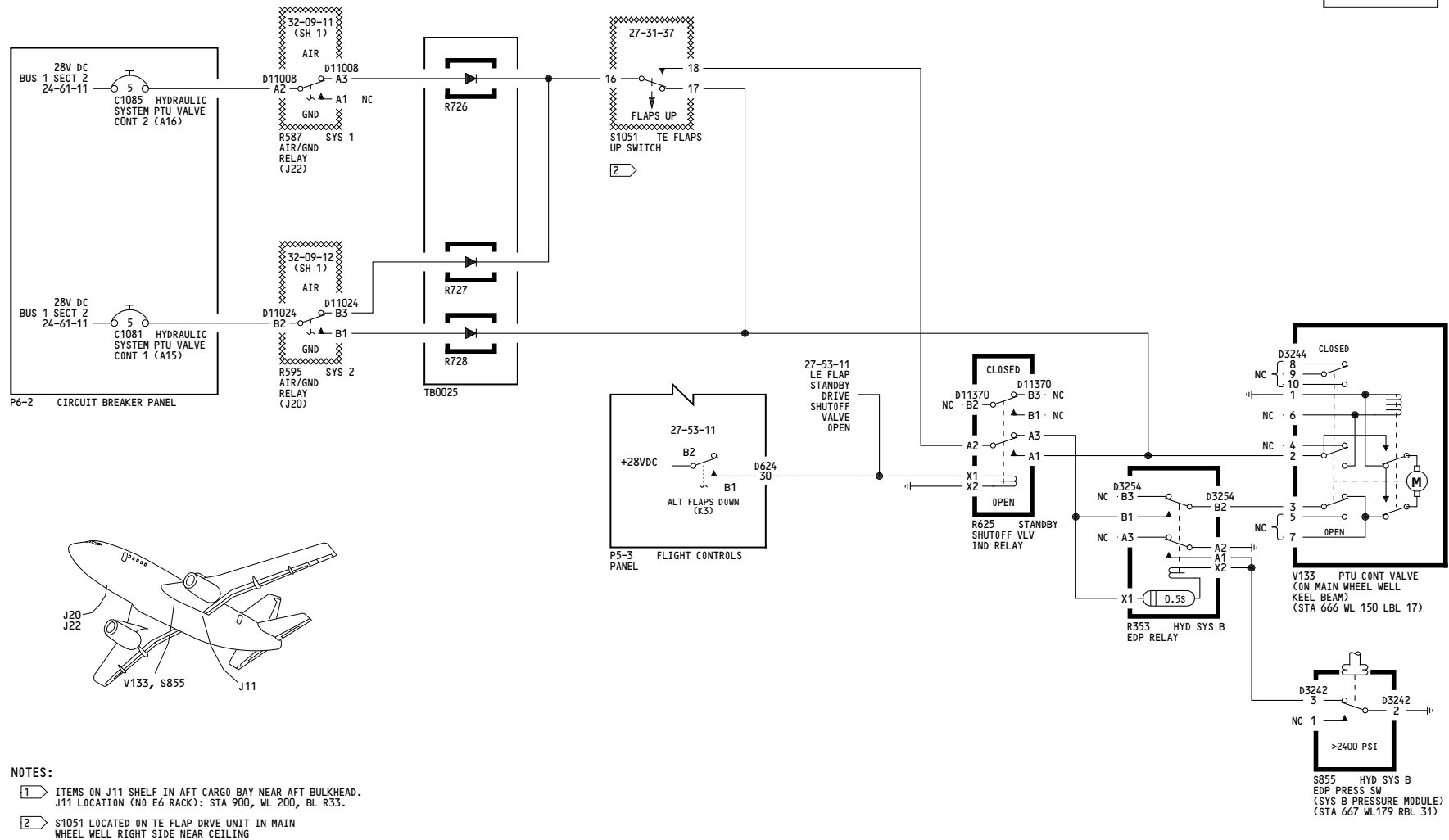


- NOTES:
- 1 ITEMS ON J11 SHELF IN AFT CARGO BAY NEAR AFT BULKHEAD. J11 LOCATION (NO E6 RACK): STA 900, WL 200, BL R33.
  - 2 S1051 S138 LOCATED ON TE FLAP DRIVE UNIT IN MAIN WHEEL WELL RIGHT SIDE NEAR CEILING

YC008-YK906	<b>HYDRAULIC POWER TRANSFER UNIT CONTROL</b>
D280A203	

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**WIRING DIAGRAMS**  
29-25-11



YK907-YK912, YK918-YK919, YL401-YL429	<b>HYDRAULIC POWER TRANSFER UNIT CONTROL</b>
	D280A203

**29-25-11**

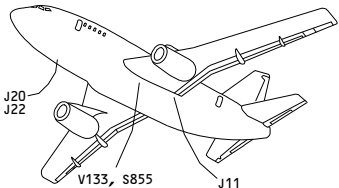
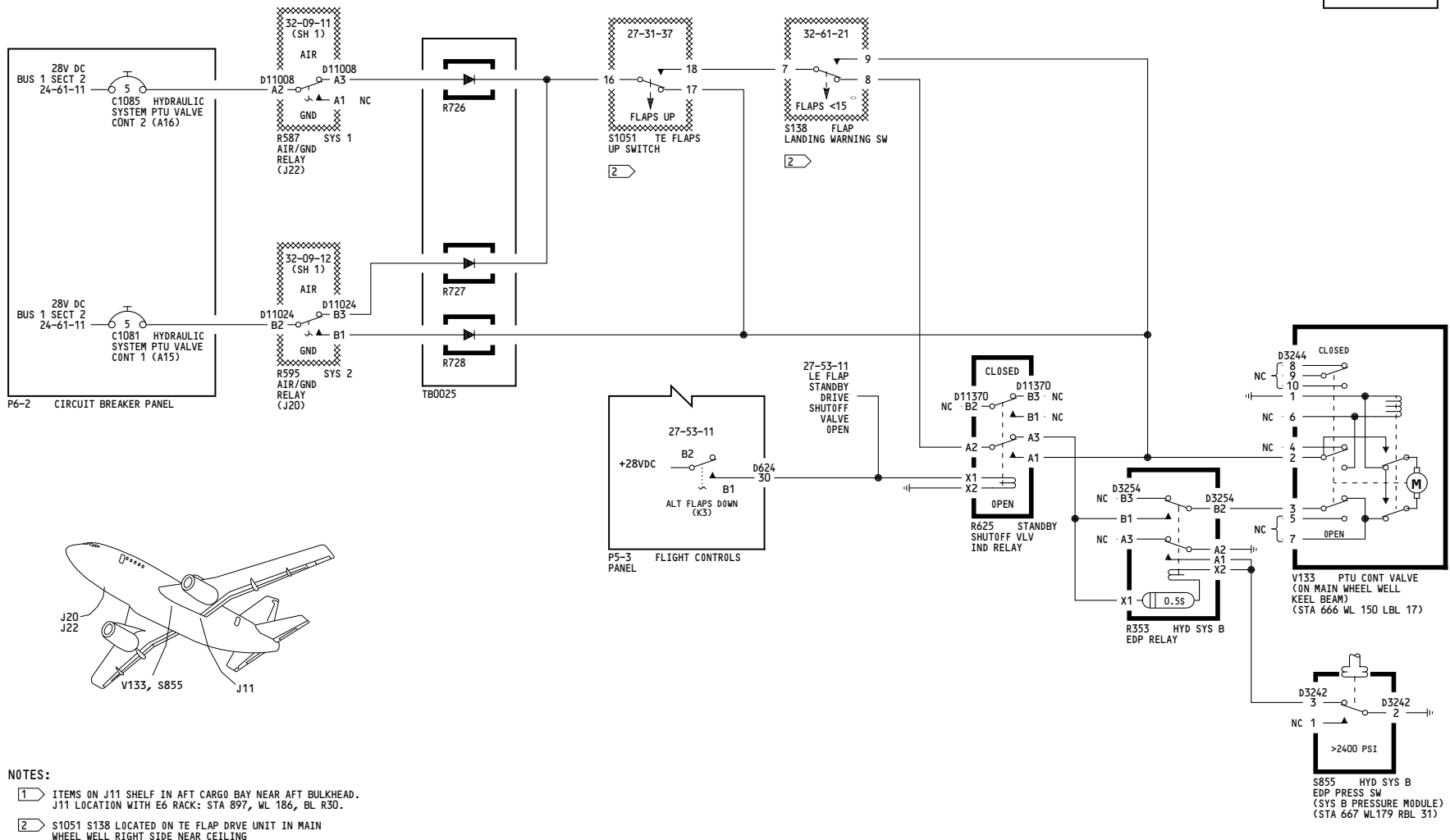
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WIRING DIAGRAMS  
29-25-11



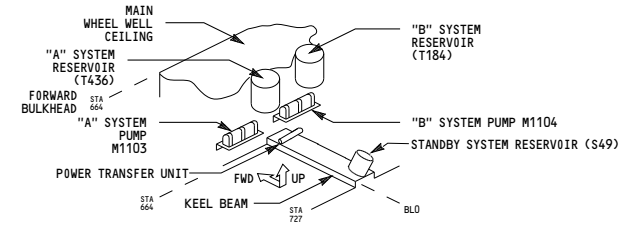
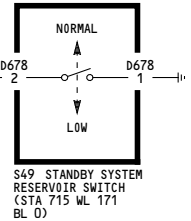
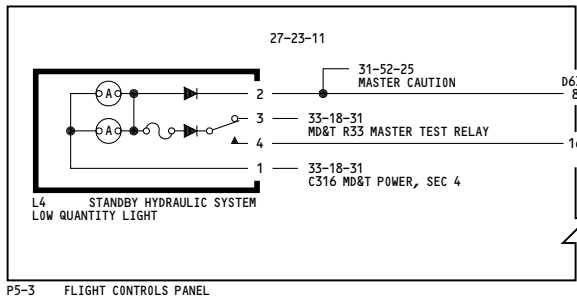
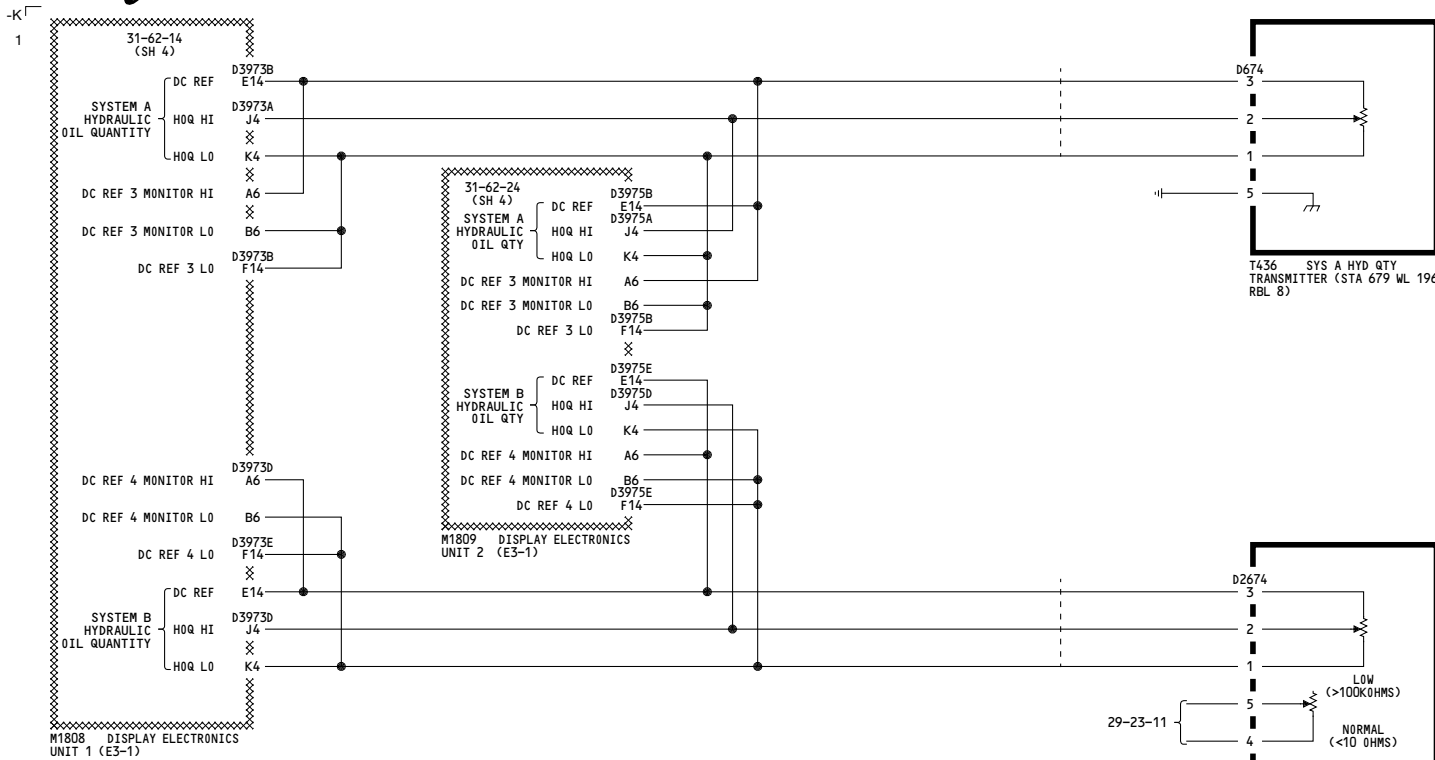
<p>YM643-YM652</p>	<p><b>HYDRAULIC POWER TRANSFER UNIT CONTROL</b></p> <p>D280A203</p>
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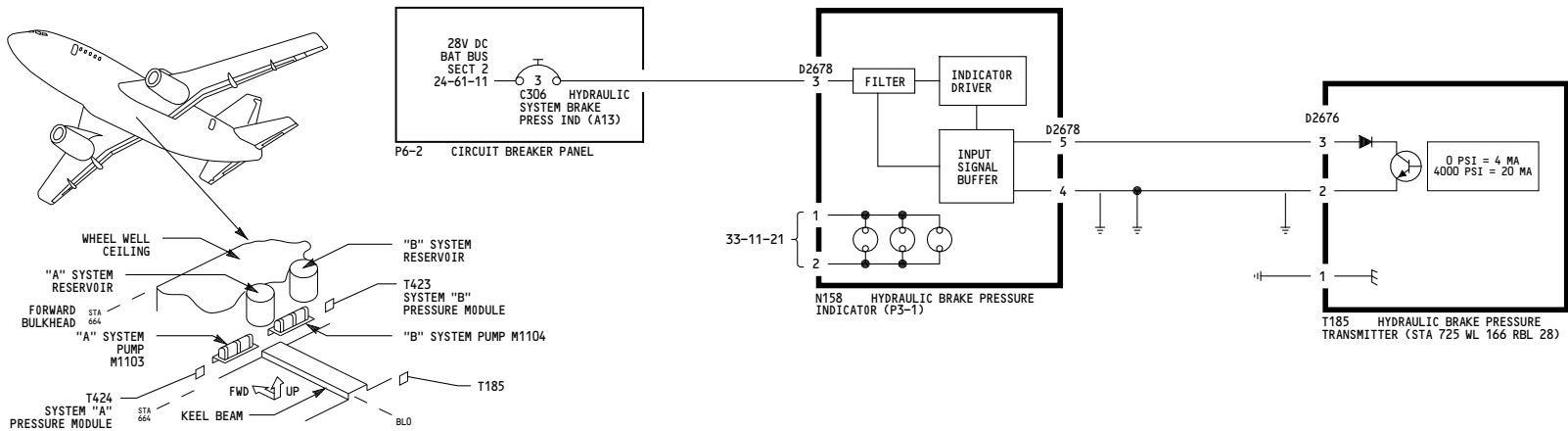
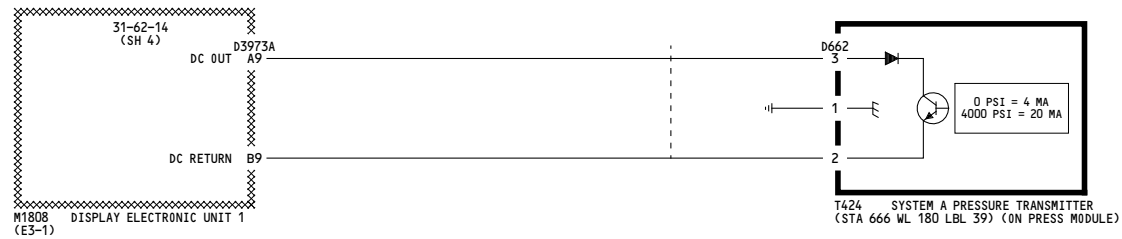
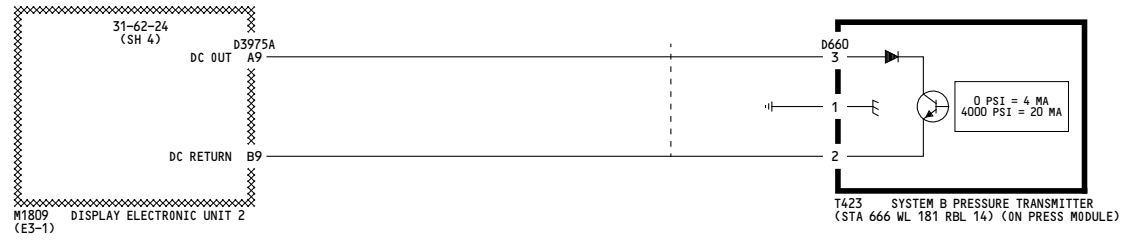
**WIRING DIAGRAMS**  
29-31-11



ALL	<b>HYDRAULIC FLUID QUANTITY INDICATION</b>  D280A203
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2

WIRING DIAGRAMS  
29-32-11



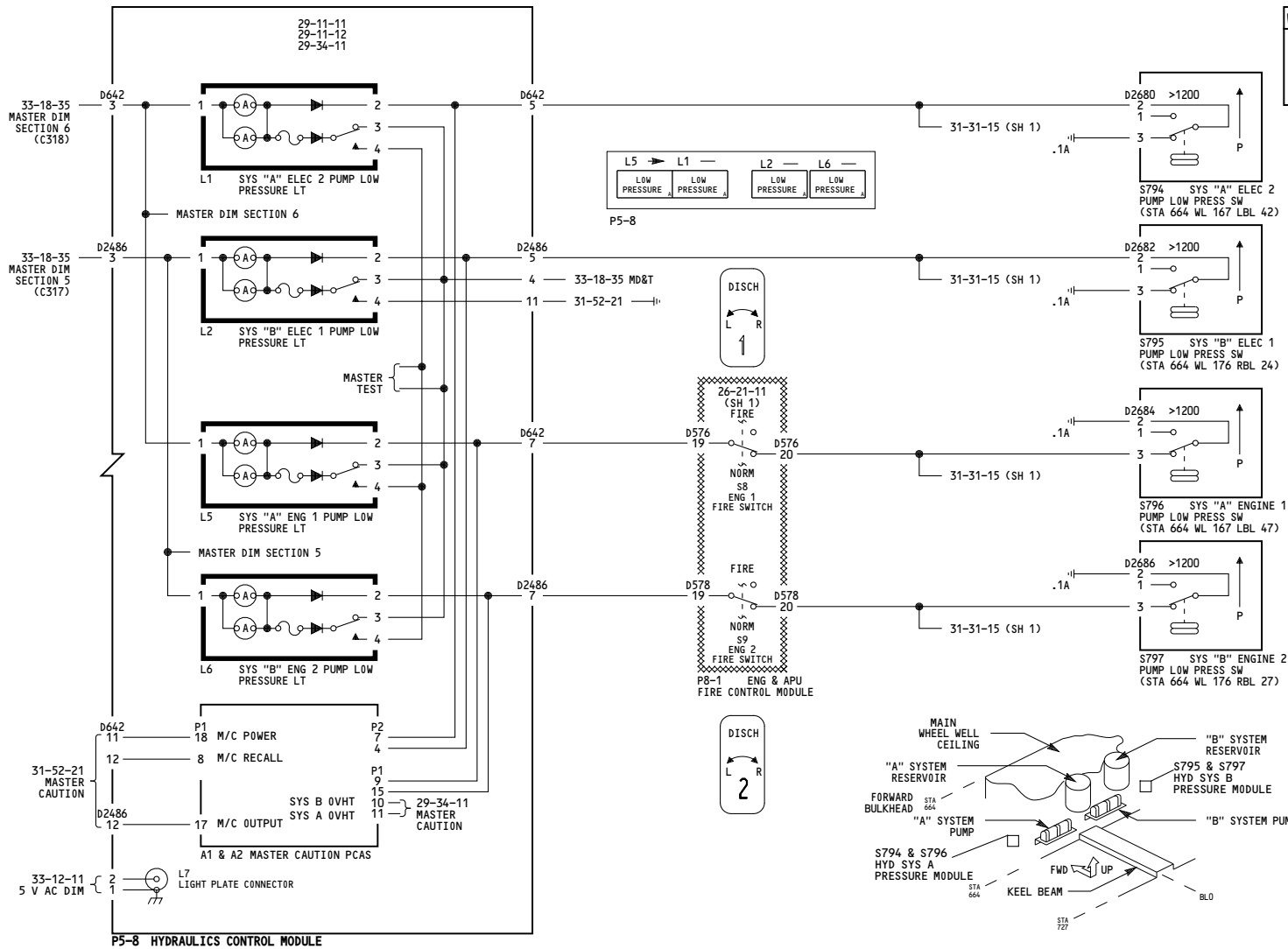
ALL	<b>HYDRAULIC FLUID PRESSURE INDICATION</b>
	D280A203

**29-32-11**

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ALL

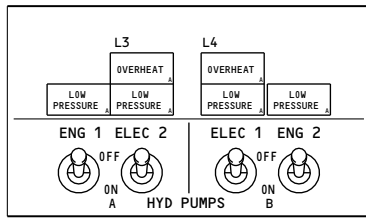
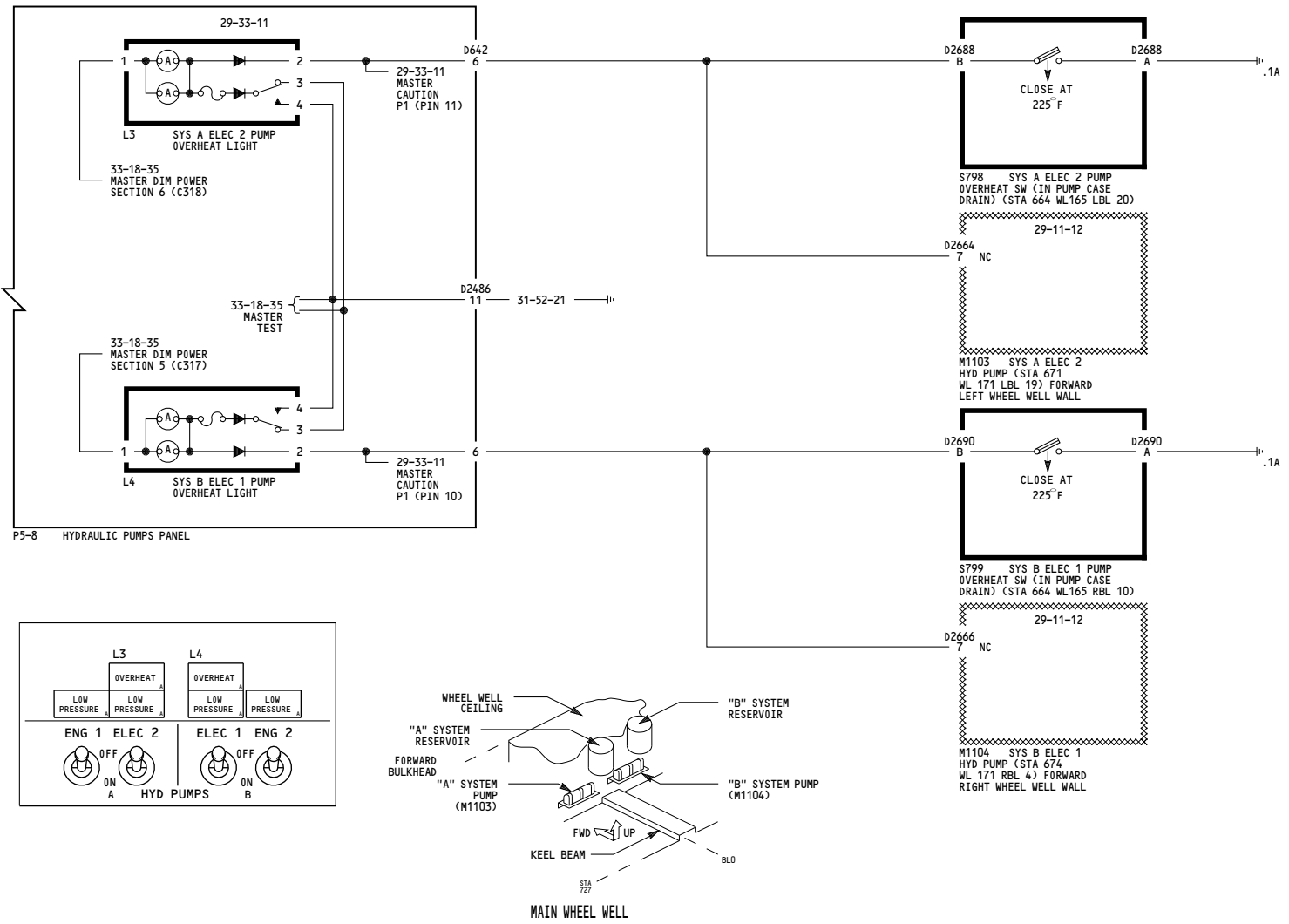
**HYDRAULIC SYSTEM LOW PRESSURE LIGHTS**

D280A203

**29-33-11**

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2

WIRING DIAGRAMS  
29-34-11



ALL

**MAIN HYDRAULIC SYSTEM OVERHEAT LIGHTS**

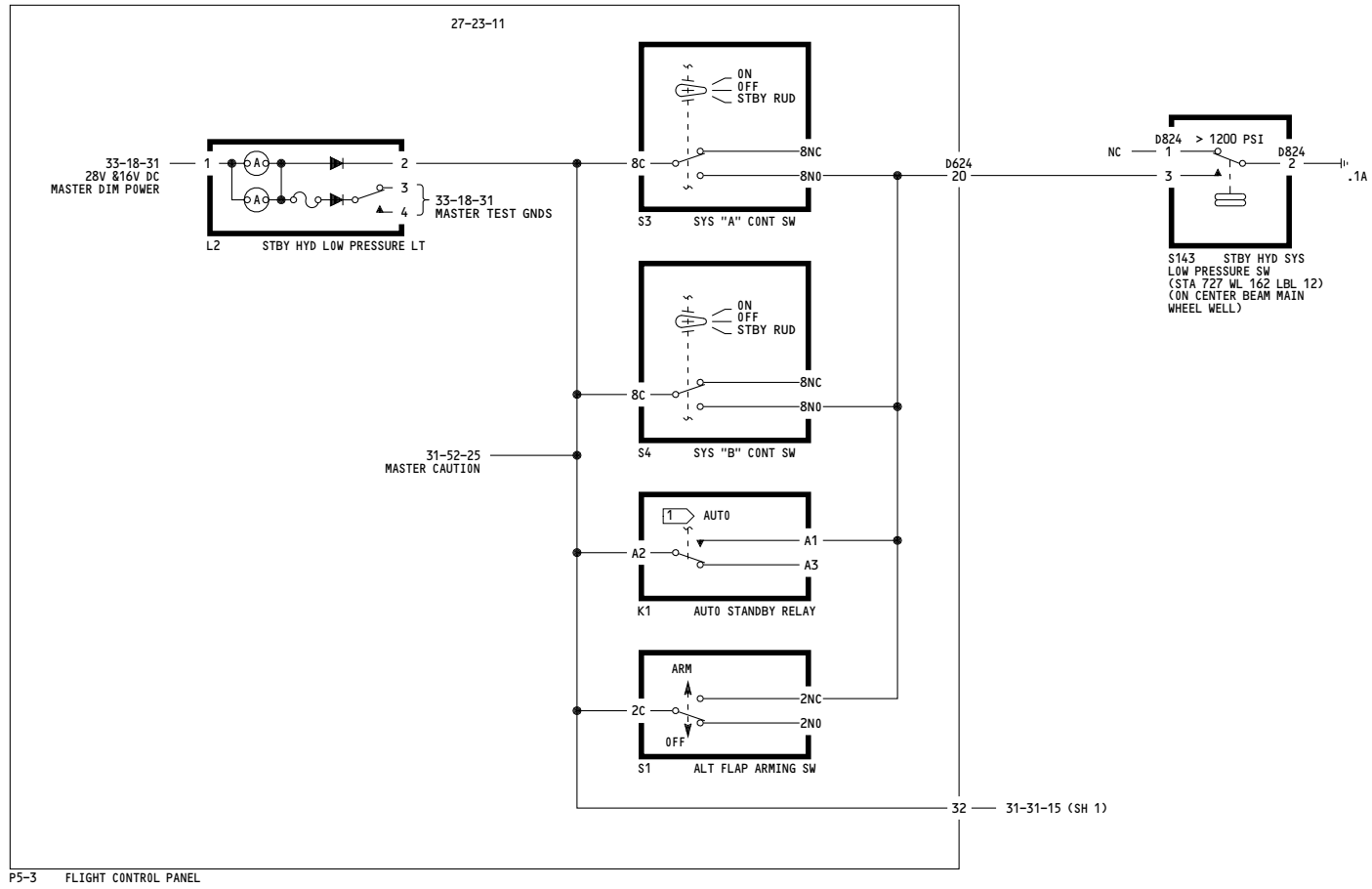
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**29-34-11**

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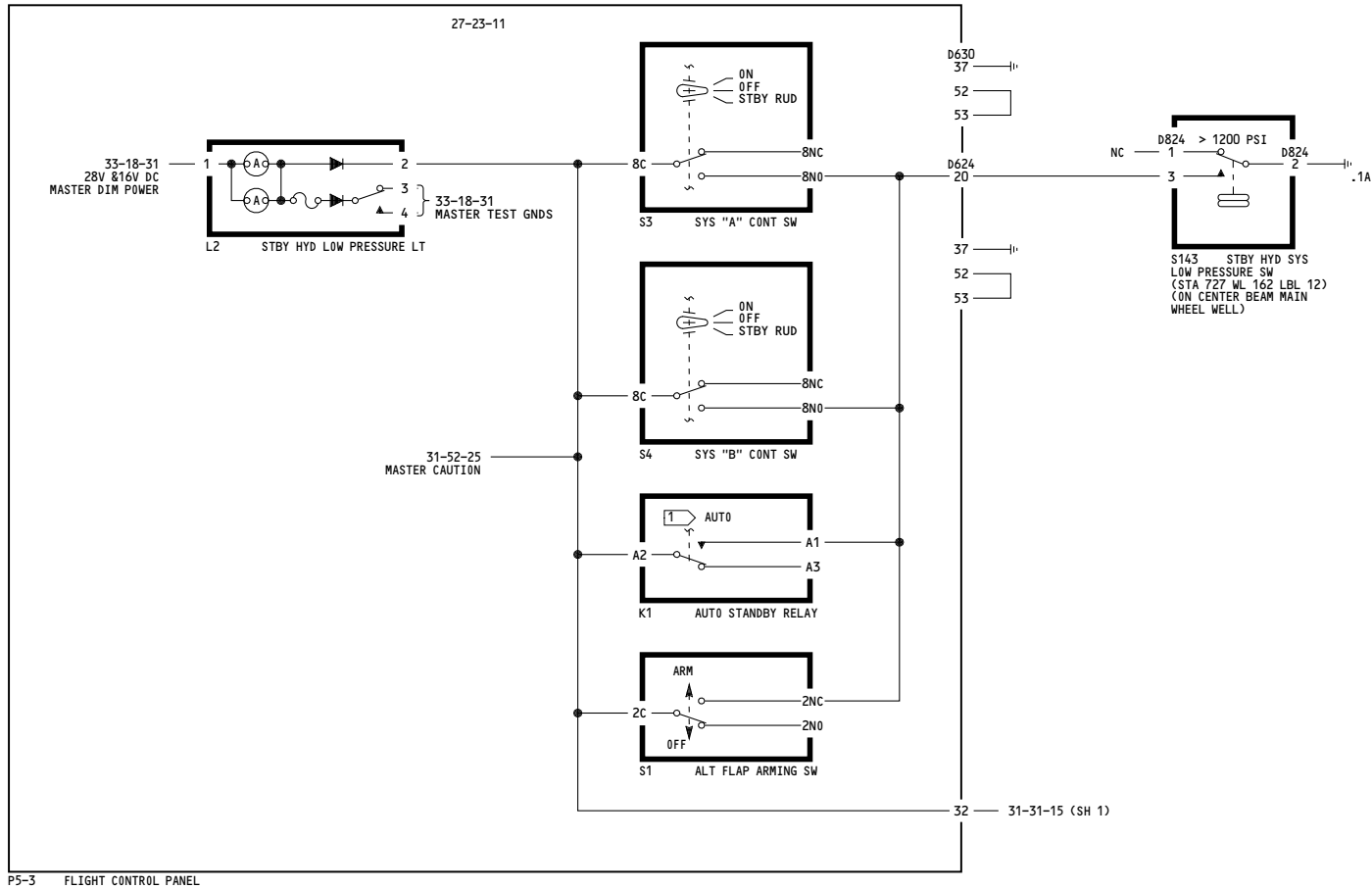
Feb 09/2009

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1



1 AUTO STANDBY RELAY ENERGIZED WHEN FLAPS NOT UP, "A" OR "B" HYD SYSTEM PRESSURE < 1200 PSI, AND WHEEL SPEED > 60 KNOTS OR AIRPLANE IN AIR.

YC001-YC030	<b>STANDBY HYDRAULIC SYSTEM LOW PRESSURE LIGHTS</b>  D280A203
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**NOTES:**

- 1 AUTO STANDBY RELAY ENERGIZED WHEN FLAPS NOT UP, "A" OR "B" HYD SYSTEM PRESSURE < 1200 PSI, AND WHEEL SPEED > 60 KNOTS OR AIRPLANE IN AIR.

YC001-YC030	<b>STANDBY HYDRAULIC SYSTEM LOW PRESSURE LIGHTS</b>
D280A203	

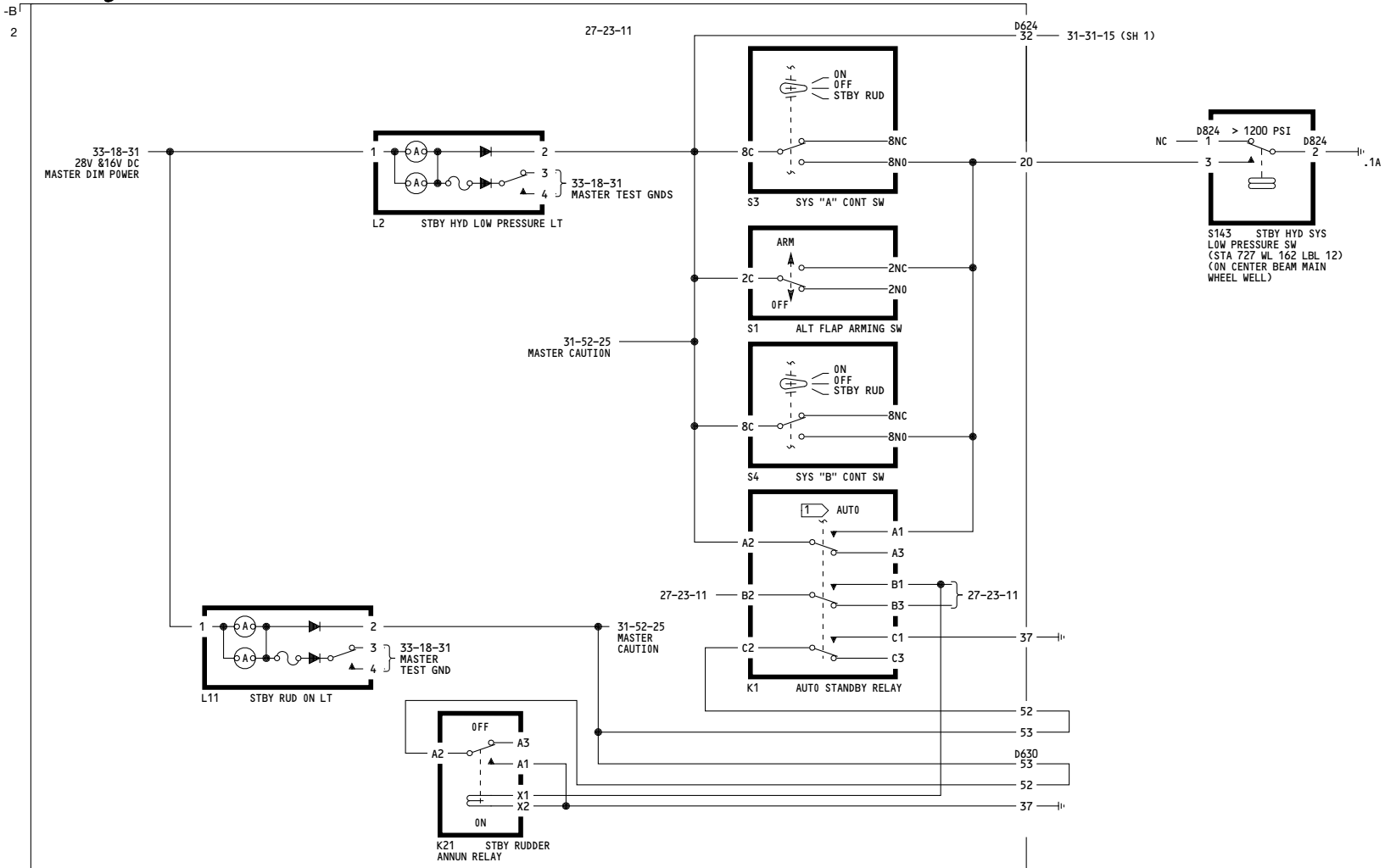
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**WIRING DIAGRAMS**  
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P5-3 FLIGHT CONTROL PANEL

- 1) AUTO STANDBY RELAY ENERGIZED WHEN (A) OR (B) OCCURS
- (A) FLAPS NOT UP AND 1) AND 2) BELOW
- 1) AIRPLANE IN AIR OR WHEEL SPEED >60 KNOTS
- 2) FLT CONT SYS A OR SYS B PRESSURE <1200 PSI
- (B) MAIN RUDDER PCU FORCE FIGHT MONITOR TRIPS (FORCE FIGHT >3600PSID)

YC031-YM670	<b>STANDBY HYDRAULIC SYSTEM LOW PRESSURE LIGHTS</b>
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