

7.2. WARNING LIGHT LIST, P. 2

INTERNATIONAL TRUCK AND ENGINE CORPORATION		ELECTRICAL CIRCUIT DIAGRAM		CHAPTER 7		
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.		WARNING LIGHTS LIST				
IP WARNING LIGHTS						
WARNING LIGHT TITLE	SIGNAL PATH			SENSOR LOCATION		
RANGE INHIBITED	TRANS CTRLR/DRIVE TRAIN J1939/CLUSTER					
FUEL FILTER	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER			FUEL FILTER		
ENGINE (YELLOW LED)	ENGINE CTRLR/DRIVE TRAIN J1939/CLUSTER					
ENGINE (RED LED)	ENGINE CTRLR/DRIVE TRAIN J1939/CLUSTER					
BRAKE PRESSURE (P)	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER			SWITCH		
BRAKE FLUID	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER			BRK RESEVOIR		
TRAC CTRL	TRUCK ABS CTRLR/DRIVE TRAIN J1939/CLUSTER					
CHECK TRANS	TRANS CTRLR/DRIVE TRAIN J1939/CLUSTER					
TRAILER ABS	TRLR ABS CTRLR/DRIVE TRAIN J1939/CLUSTER					
WASHER FLUID	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER			WASHER BOTTLE		
(LEFT TURN)	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER			TURN SIG SW		
AIR BAG	DISCRETE NOT ON DATA BUS					
WATER IN FUEL	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER			FUEL FILTER		
COOLANT LEVEL	ENGINE CTRLR/DRIVE TRAIN J1939/CLUSTER			SURGE TANK		
CHECK ELECT SYS	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER					
PARK (P)	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER			SWITCH		
CRUISE	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER					
ABS	TRUCK CTRLR/DRIVE TRAIN J1939/CLUSTER					
(RIGHT TURN)	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER					
WAIT TO START	ENGINE CTRLR/DRIVE TRAIN J1939/CLUSTER					
FASTEN BELTS	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER					
(HIGH BEAM IND)	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER					
COLD AMB PROTEC	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER					
RETARD OVERHEAT	TRANS CTRLR/DRIVE TRAIN J1939/CLUSTER			TRANSMISSION		
CHECK AC	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER					
AUTO NEUTRAL	DISCRETE NOT ON DATA BUS			SWITCH		
ALTERNATOR	DISCRETE NOT ON DATA BUS					
PTO/THROTTLE	SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER					
OPTIMIZED IDLE	DISCRETE NOT ON DATA BUS					
SNOW VALVE	DISCRETE NOT ON DATA BUS			SNOW VALVE		
FR AXLE DIFF LOCK	DISCRETE NOT ON DATA BUS			FWD RR AXLE		
RR AXLE DIFF LOCK	DISCRETE NOT ON DATA BUS			RR RR AXLE		
MESSAGE WAIT	DISCRETE NOT ON DATA BUS					
PTO	DISCRETE NOT ON DATA BUS					
CONVERTER TEMP	DISCRETE NOT ON DATA BUS					
TOUCHLOC RELEASE	DISCRETE NOT ON DATA BUS					
PARK FLUID	SYSTEM CTRLR/DRIVE TRAIN					
CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME
PEC	16JAN01	PRODUCTION RELEASE.	A	P54304U	U00JXP9	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS
					RELEASE NO.	DATE
					P52778H	09AUG00
						PART NO.
						AE08-52371
						SHEET
						02

Figure 59 Warning Light List

7.3. WARNING LIGHTS CONTROLLED BY ENGINE, TRANSMISSION, ABS CONTROLLER, P. 3

INTERNATIONAL TRUCK AND ENGINE CORPORATION THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.	ELECTRICAL CIRCUIT DIAGRAM CHAPTER 7 WARNING LIGHTS CONTROLLED BY ENGINE, TRANSMISSION, ABS CONTROLLER					
THE FOLLOWING WARNING LIGHTS ARE CONTROLLED BY THE ENGINE, TRANSMISSION, OR ABS CONTROLLER OVER THE DATA BUS AND DO NOT HAVE INDEPENDENT CIRCUITRY THAT CAN BE OR NEEDS TO BE SHOWN: RANGE INHIBIT ENGINE (YELLOW LED) ENGINE (RED LED) TRAC CTRL CHECK TRANS TRAILER ABS CHECK ELECTR SYS ABS WAIT TO START RETARD OVERHEAT AUTO NEUTRAL (NOT ON DATA BUS TO CLUSTER) OPTIMIZED IDLE (NOT ON DATA BUS TO CLUSTER)						
CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME
PEC	16JAN01	PRODUCTION RELEASE.	A	P54304U	U00JXP9	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS
					RELEASE NO.	DATE
					P52778H	20JUN00
						PART NO.
						AE08-52371
						SHEET
						03

Figure 60 Warning Lights Controlled by Engine, Transmission, ABS Controller

7.4. ENGINE OIL PRESSURE AND TEMP, SPEEDOMETER, TACH, VOLTMETER AND WATER TEMP GAUGE CIRCUITS, P. 4

INTERNATIONAL TRUCK AND ENGINE CORPORATION				ELECTRICAL CIRCUIT DIAGRAM CHAPTER 7			
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF INTERNATIONAL TRUCK AND ENGINE CORPORATION.				ENG OIL PRESS & TEMP, SPEEDOMETER, TACH, VOLTMETER & WATER TEMP GAUGE CIRCUITS			
<p>REFER TO CONSOLIDATED ENGINE/VEHICLE CONTROLLER DIAGNOSTICS MANUAL EGES-175 (DT466), EGES-190 (V8-AVNT), FOR CIRCUIT DIAGRAMS SHOWING INPUT CIRCUITRY FOR THE FOLLOWING DATALINK DRIVEN SYSTEM:</p> <p>ENGINE OIL PRESSURE GAUGE</p> <p>ENGINE OIL TEMPERATURE GAUGE</p> <p>SPEEDOMETER GAUGE</p> <p>TACHOMETER GAUGE</p> <p>WATER TEMPERATURE GAUGE</p>							
CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME	
PEC	16JAN01	PRODUCTION RELEASE.	A	P54304U	U00JXP9	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS	
					RELEASE NO.	DATE	PART NO.
					P52778H	20JUN00	AE08-52371
							SHEET 04

Figure 61 Engine Oil Pressure and Temp, Speedometer, Tach, Voltmeter and Water Temp Gauge Circuits

7.5. IP/GAUGES AND WARNING LIGHTS — GAUGE CLUSTER, P. 5

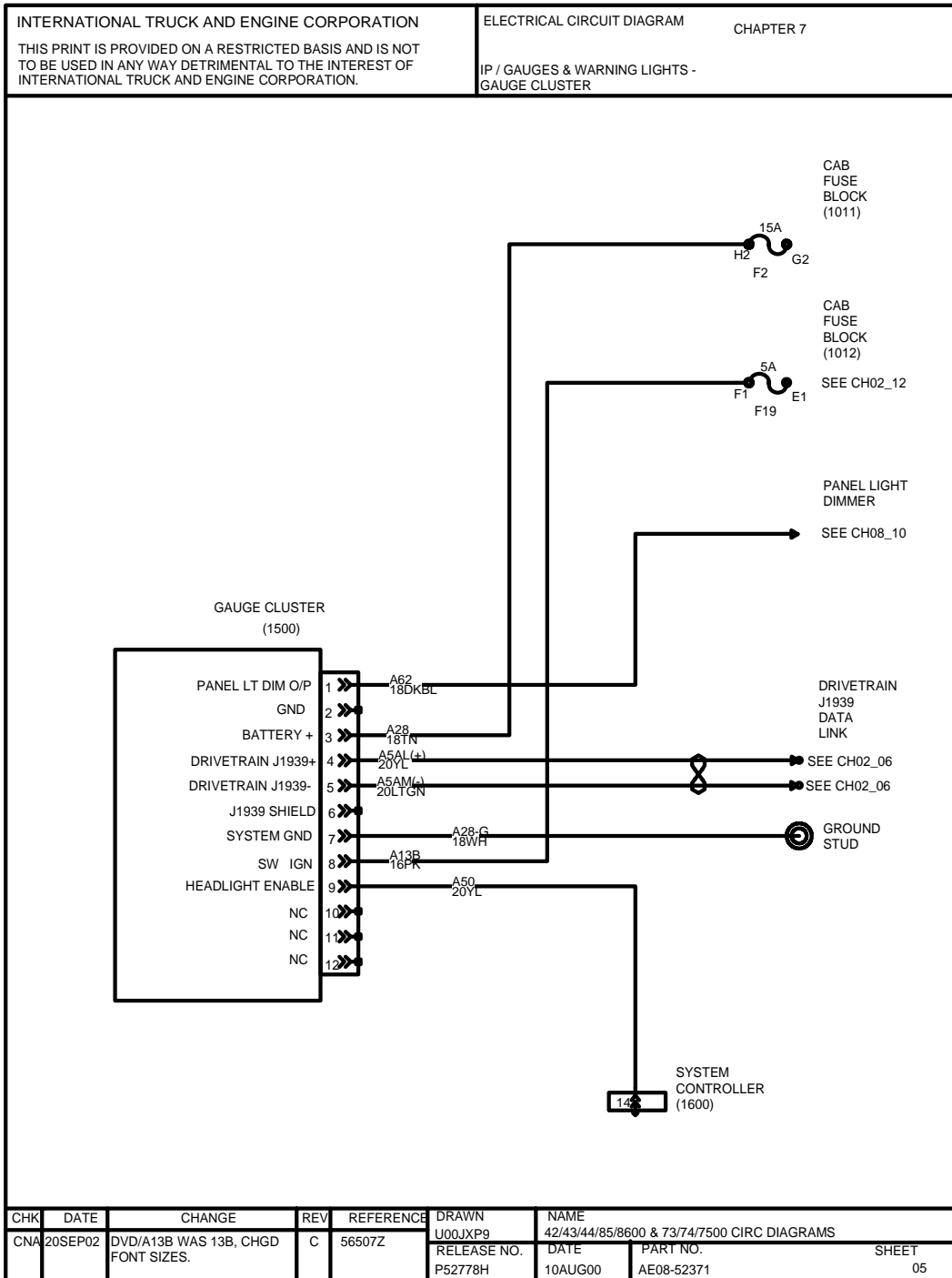


Figure 62 IP/Gauges and Warning Lights — Gauge Cluster

7.6. AIR PRESSURE INPUT CIRCUIT, P. 6

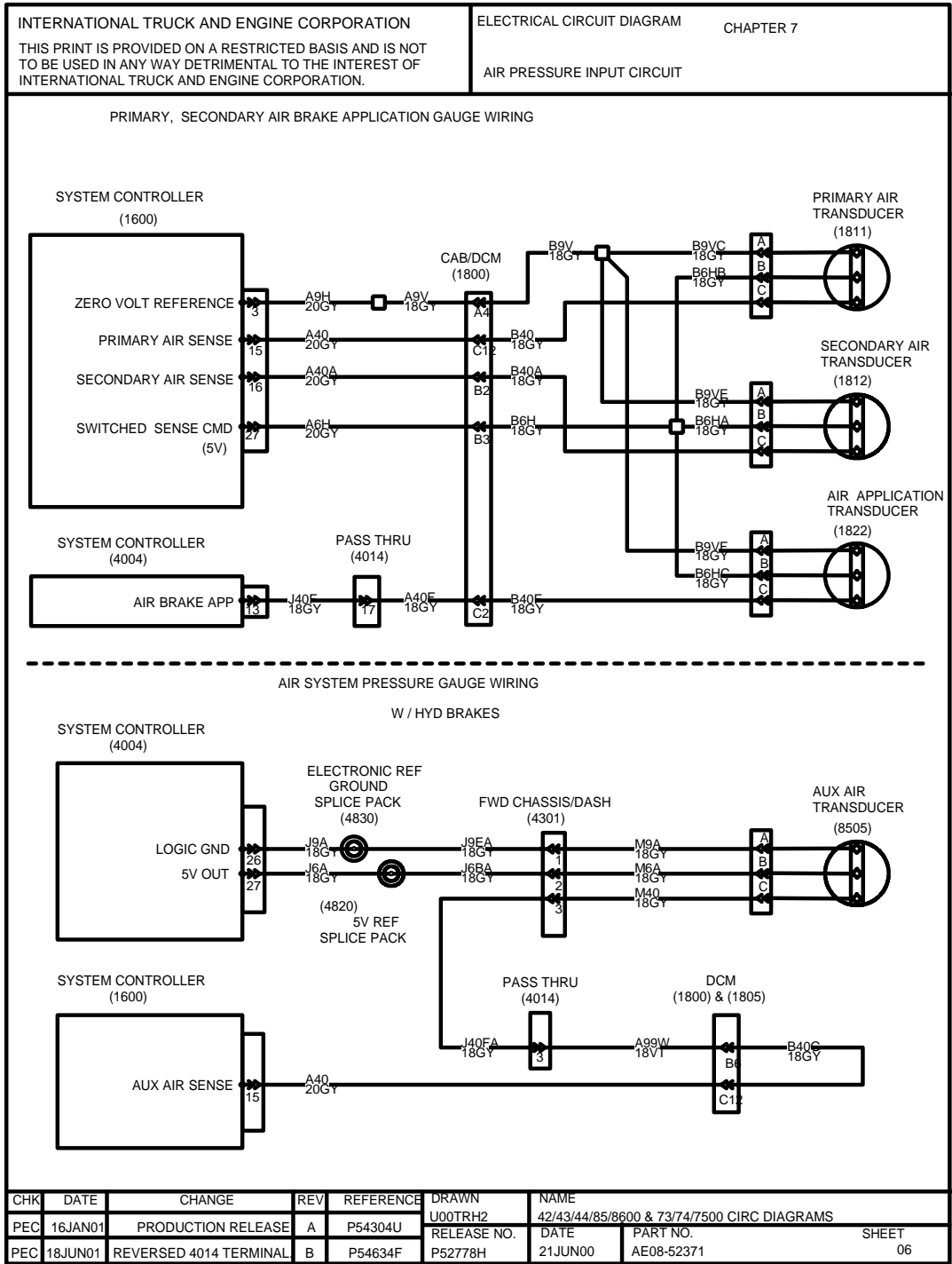


Figure 63 Air Pressure Input Circuit

7.7. AXLE TEMPERATURE, FWD REAR AND REAR AXLES, GAUGE INPUT CIRCUIT, P. 7

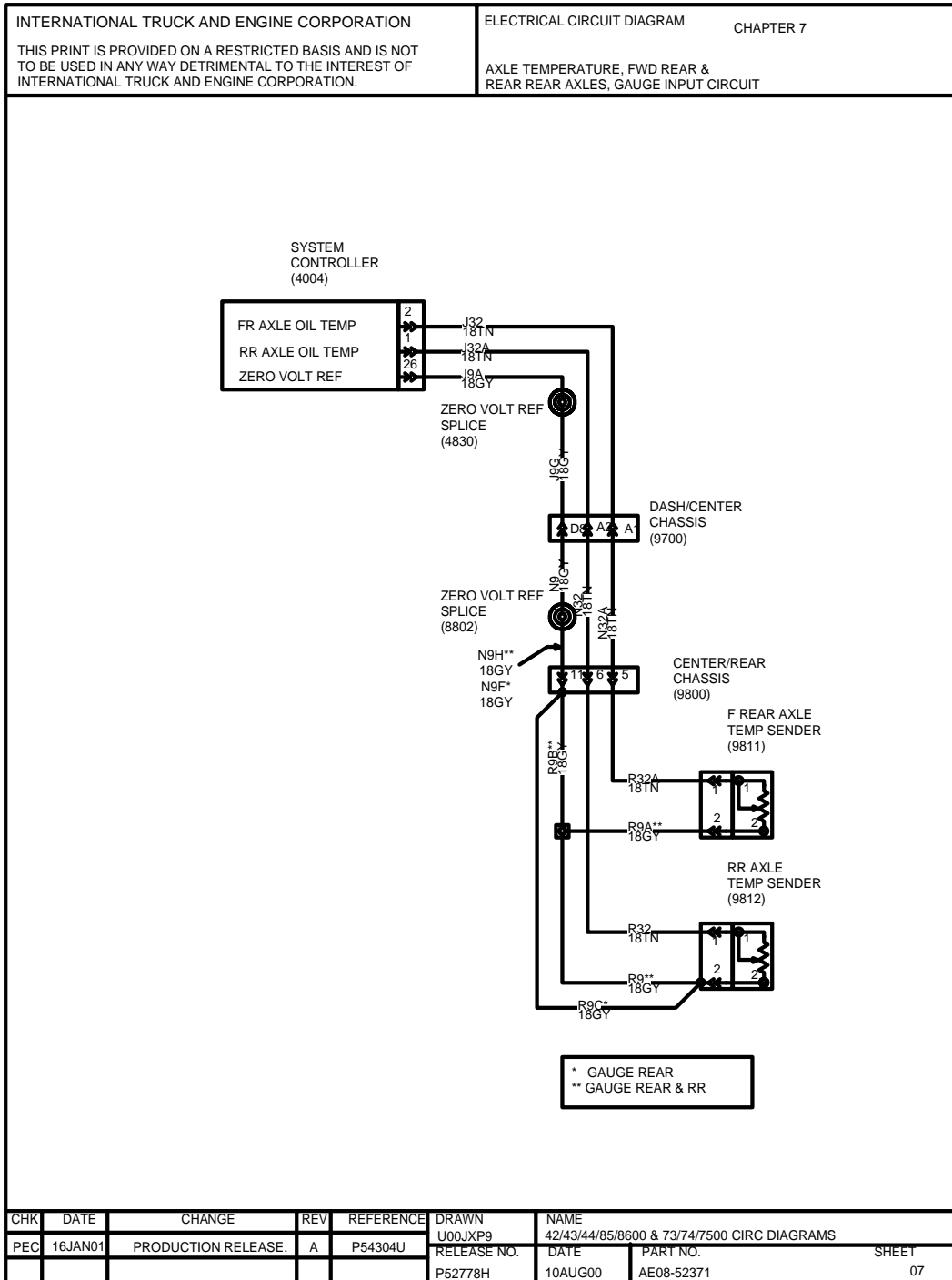


Figure 64 Axle Temperature, FWD Rear and Rear Axles, Gauge Input Circuit

7.8. FUEL GAUGE INPUT CIRCUIT (SINGLE TANK) DIFFERENTIAL LOCK WARNING LAMPS, P. 8

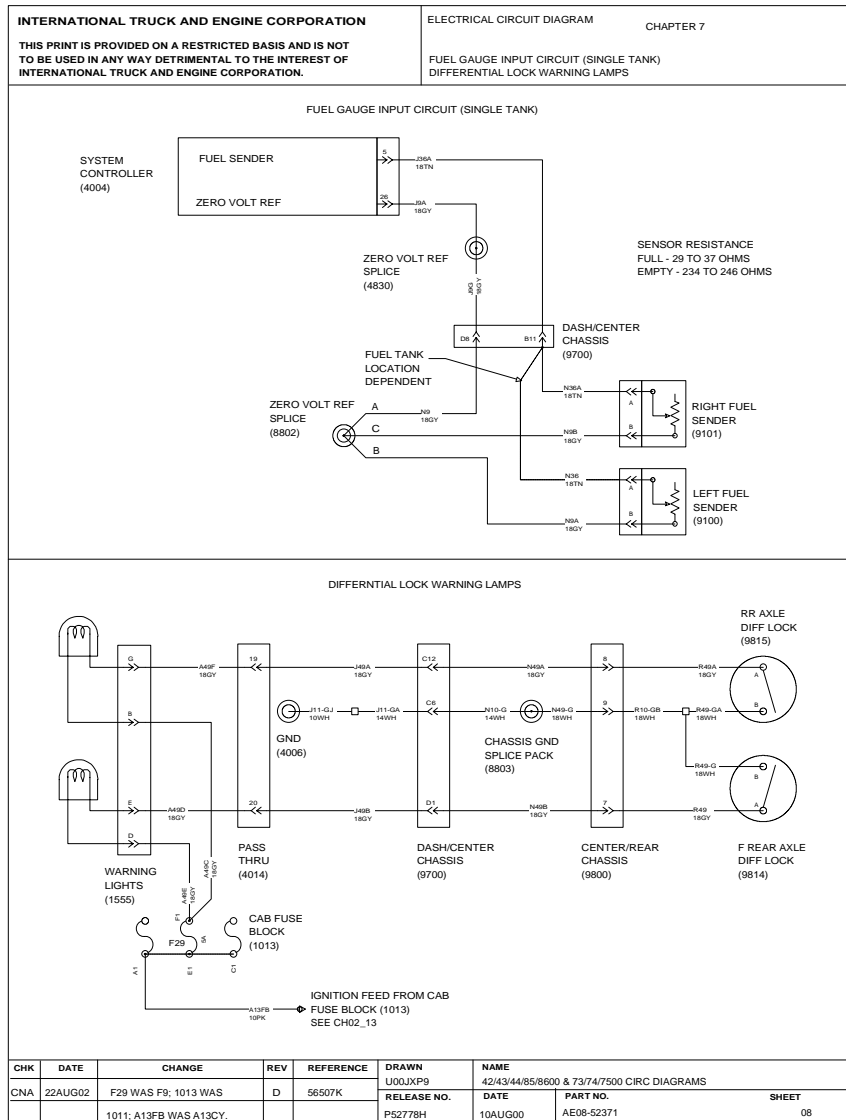


Figure 65 Fuel Gauge Input Circuit (Single Tank) Differential Lock Warning Lamps

7.9. GAUGES AND WARNING LIGHTS — FUEL FILTER RESTRICTION AND WATER IN FUEL LIGHTS, P. 9

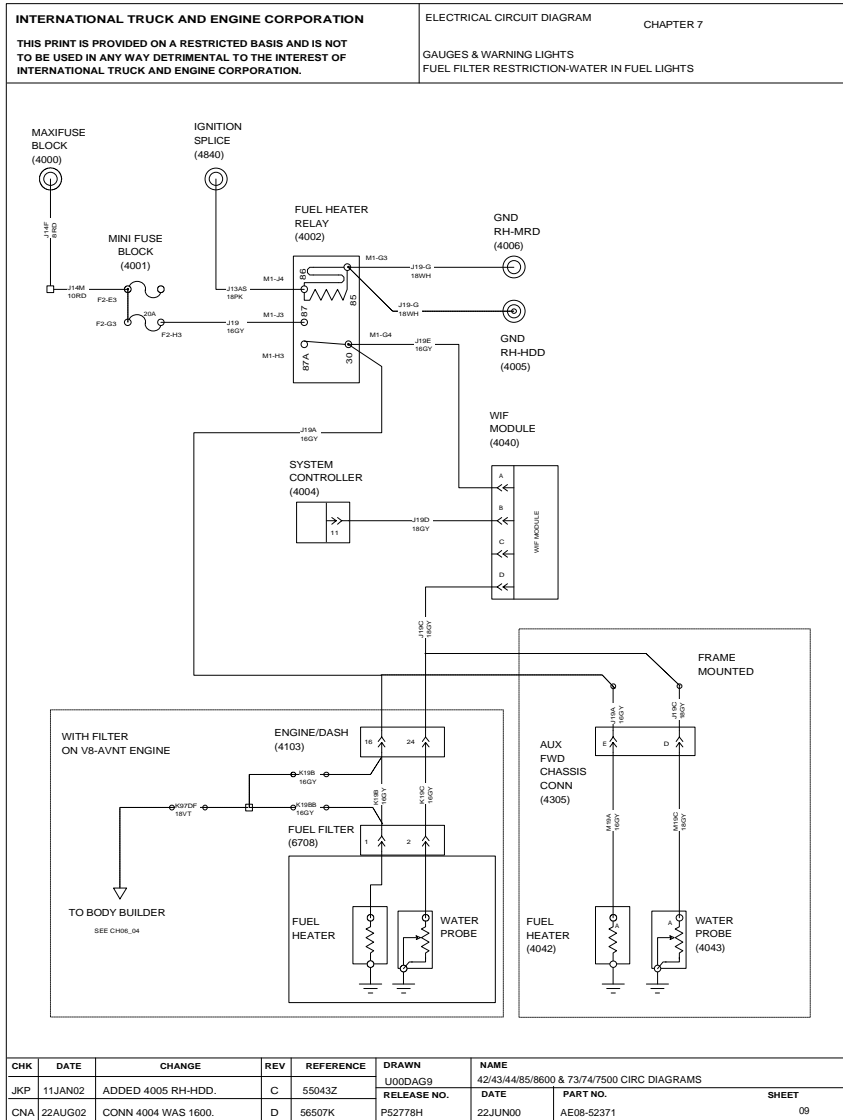


Figure 66 Gauges and Warning Lights — Fuel Filter Restriction and Water in Fuel Lights

7.10. GAUGES AND WARNING LIGHTS — PARK BRAKE LIGHT AND TRANSMISSION OIL TEMP. GAUGE, P. 10

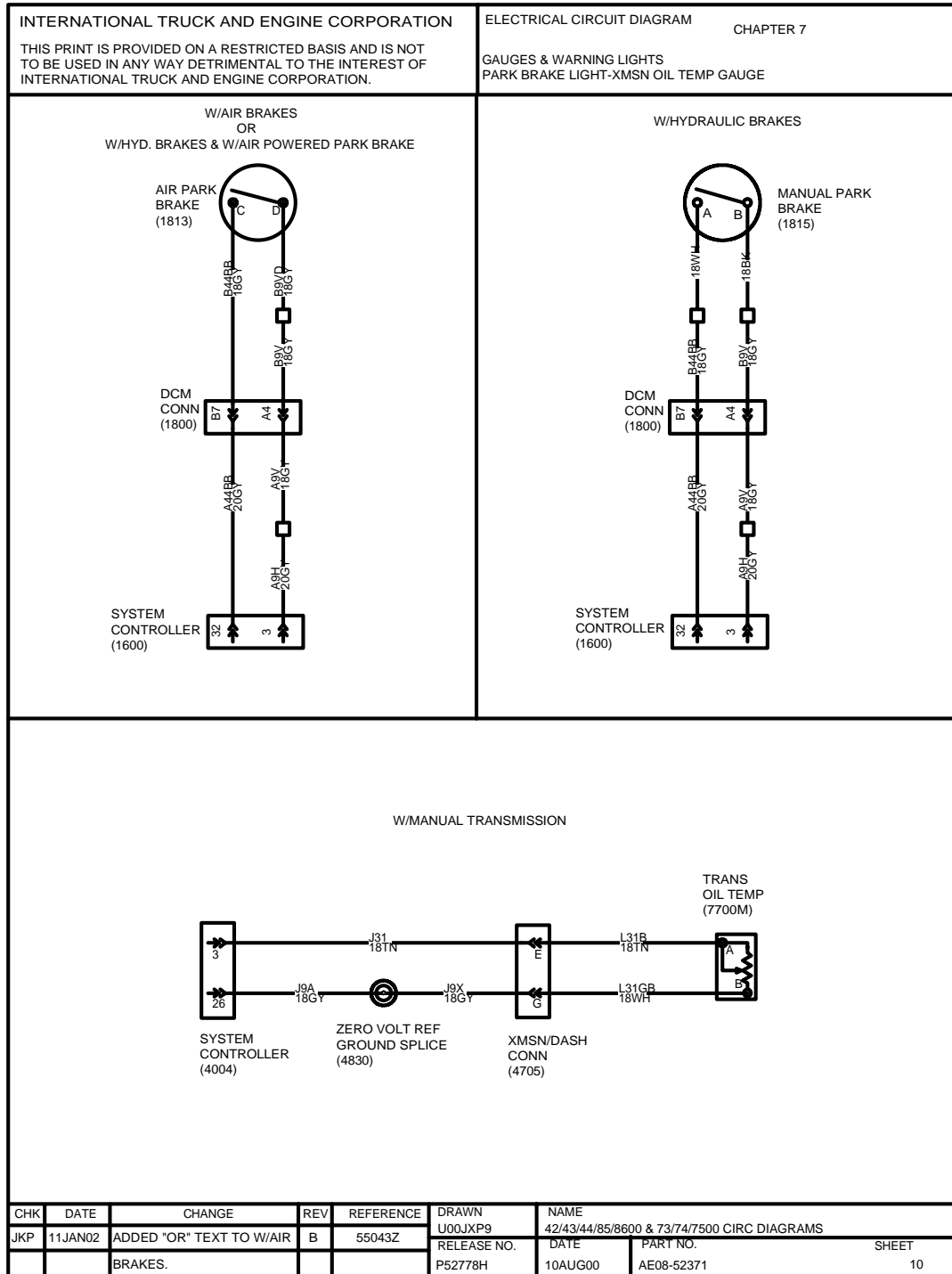


Figure 67 Gauges and Warning Lights — Park Brake Light and Transmission Oil Temp. Gauge

7.11. GAUGES AND WARNING LIGHTS — AMMETER, P. 11

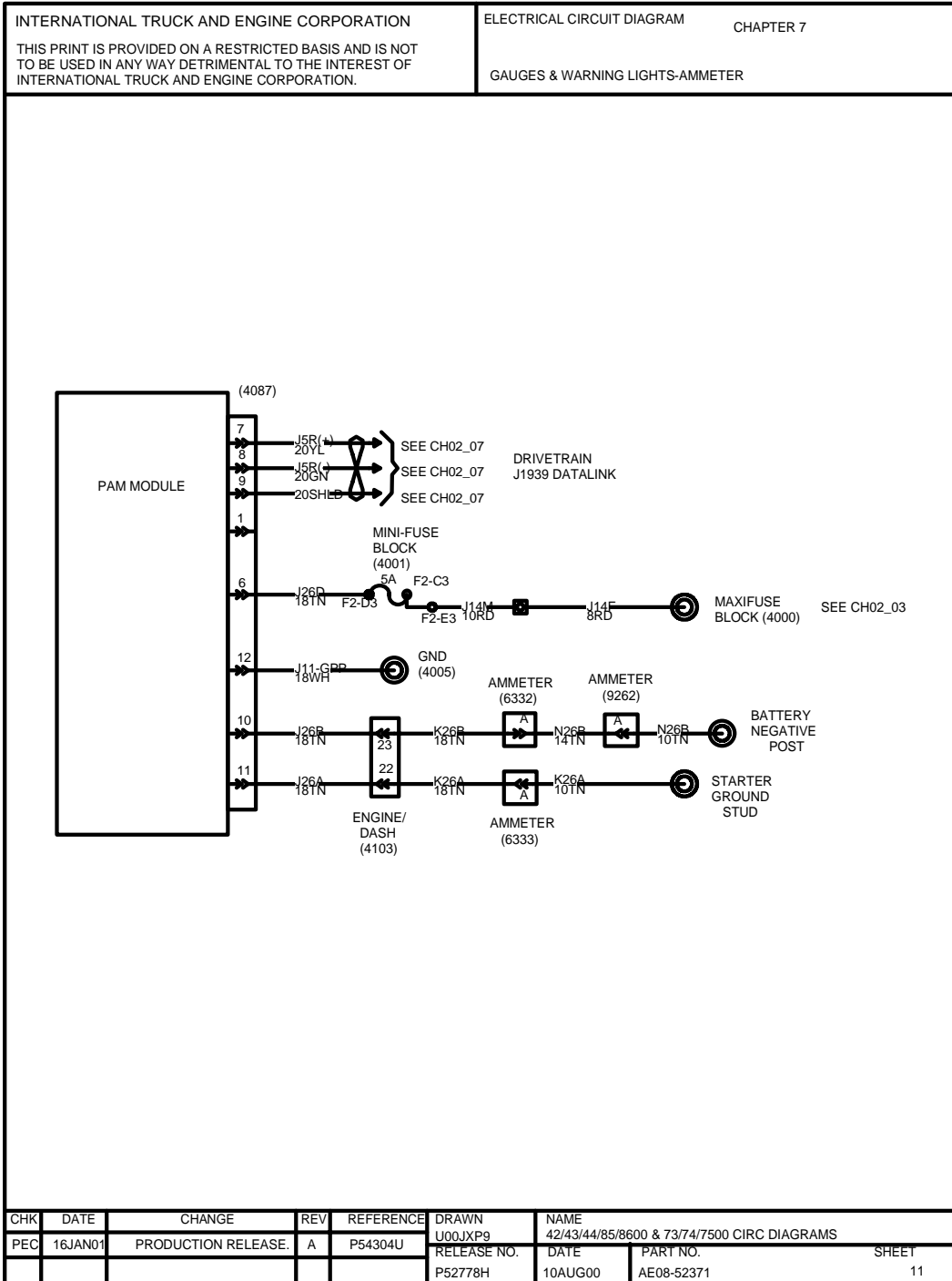


Figure 68 Gauges and Warning Lights — Ammeter

7.12. ENGINE OIL TEMPERATURE GAUGE WITH CATERPILLAR, P. 12

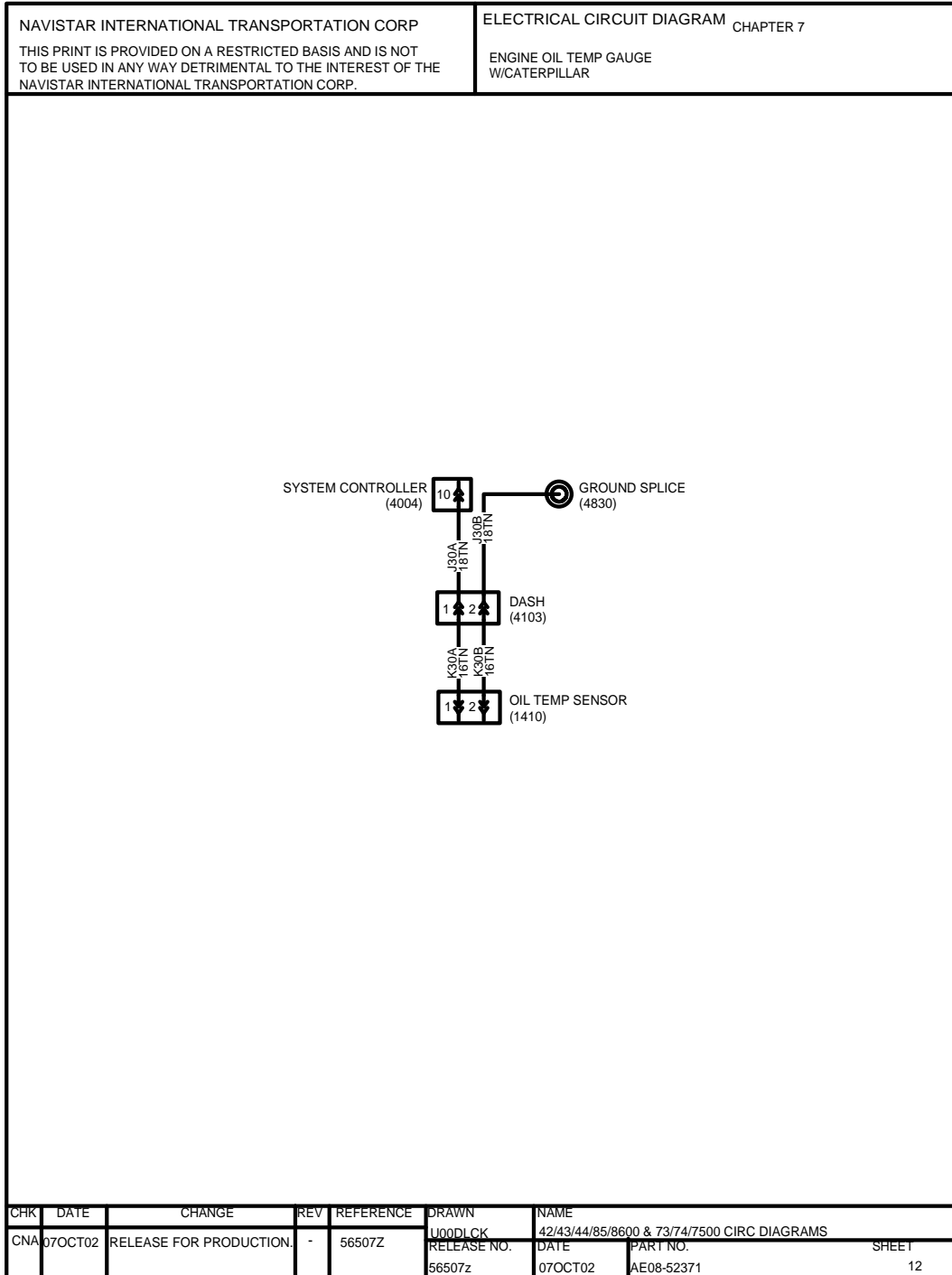


Figure 69 Engine Oil Temperature Gauge With Caterpillar

8. LIGHTS (CHAPTER 8)

8.1. BACK UP LIGHTS, P. 1

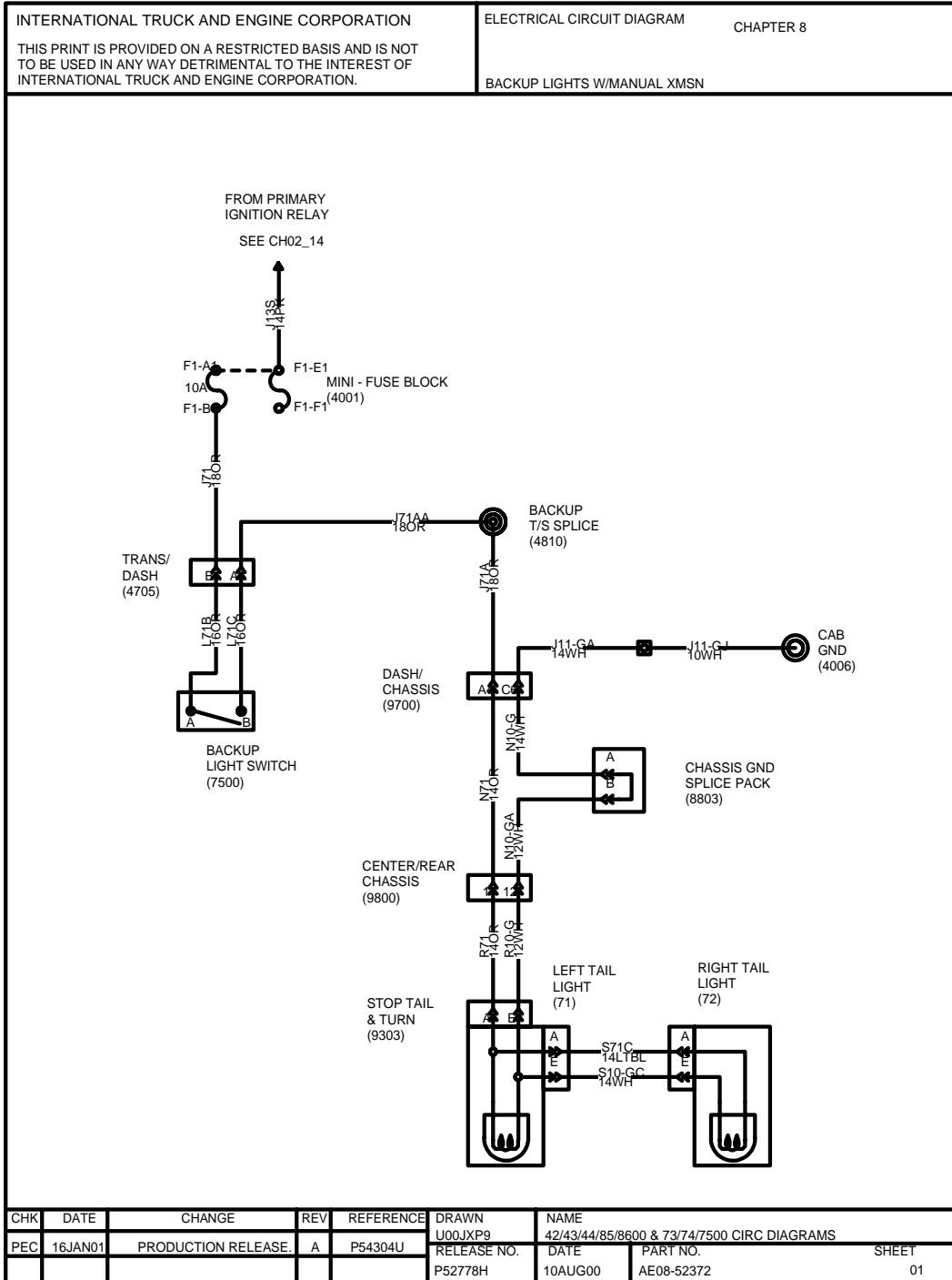


Figure 70 Back Up Lights

8.2. LIGHT SYSTEMS — CLEARANCE, MARKER, PARK, TAIL, TURN AND STOP LAMPS, P. 2

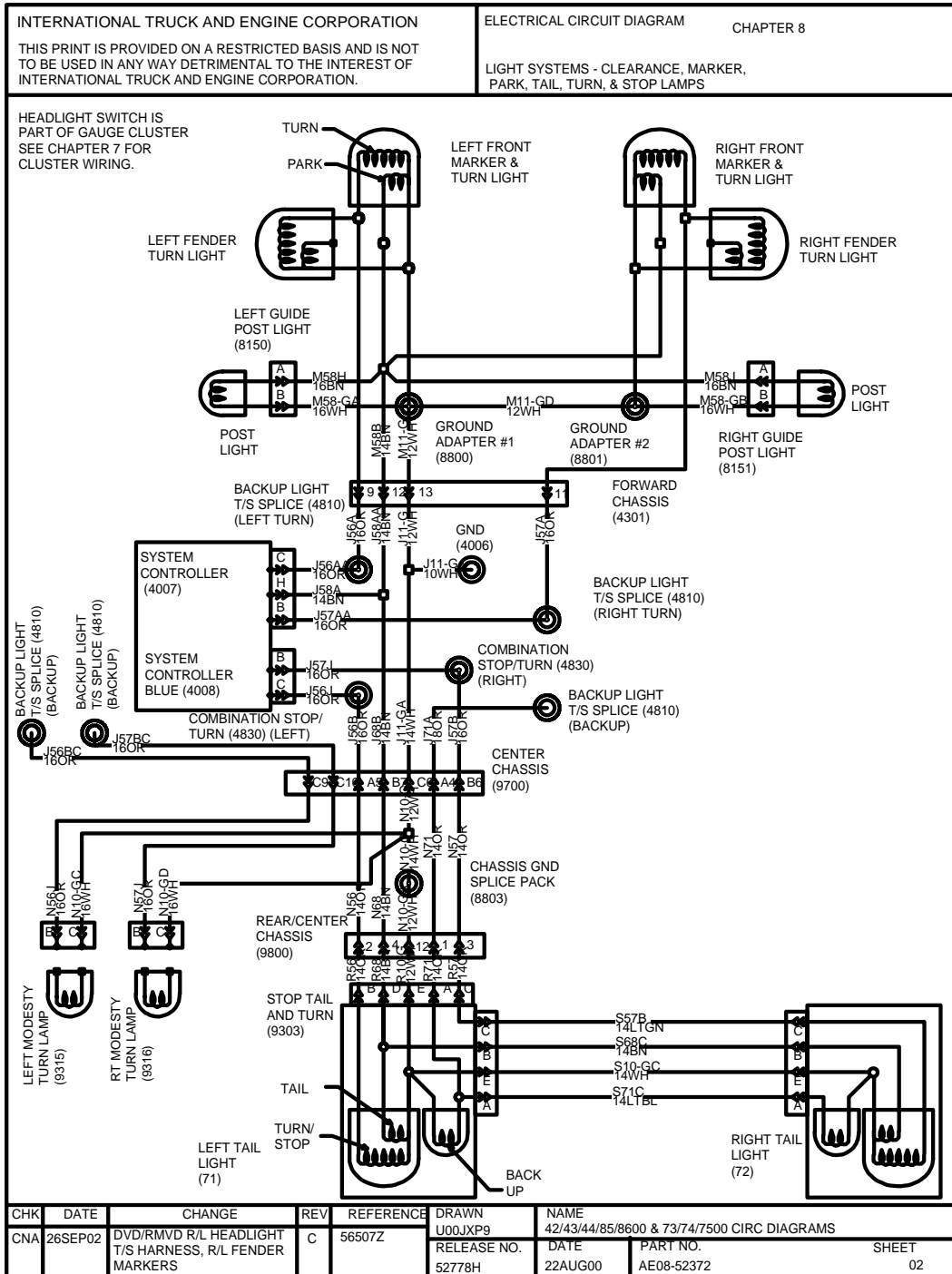


Figure 71 Light Systems — Clearance, Marker, Park, Tail, Turn and Stop Lamps

8.3. LIGHT SYSTEMS — CLEARANCE, MARKER, PARK, TAIL, TURN AND STOP LAMPS (CONT.), P. 3

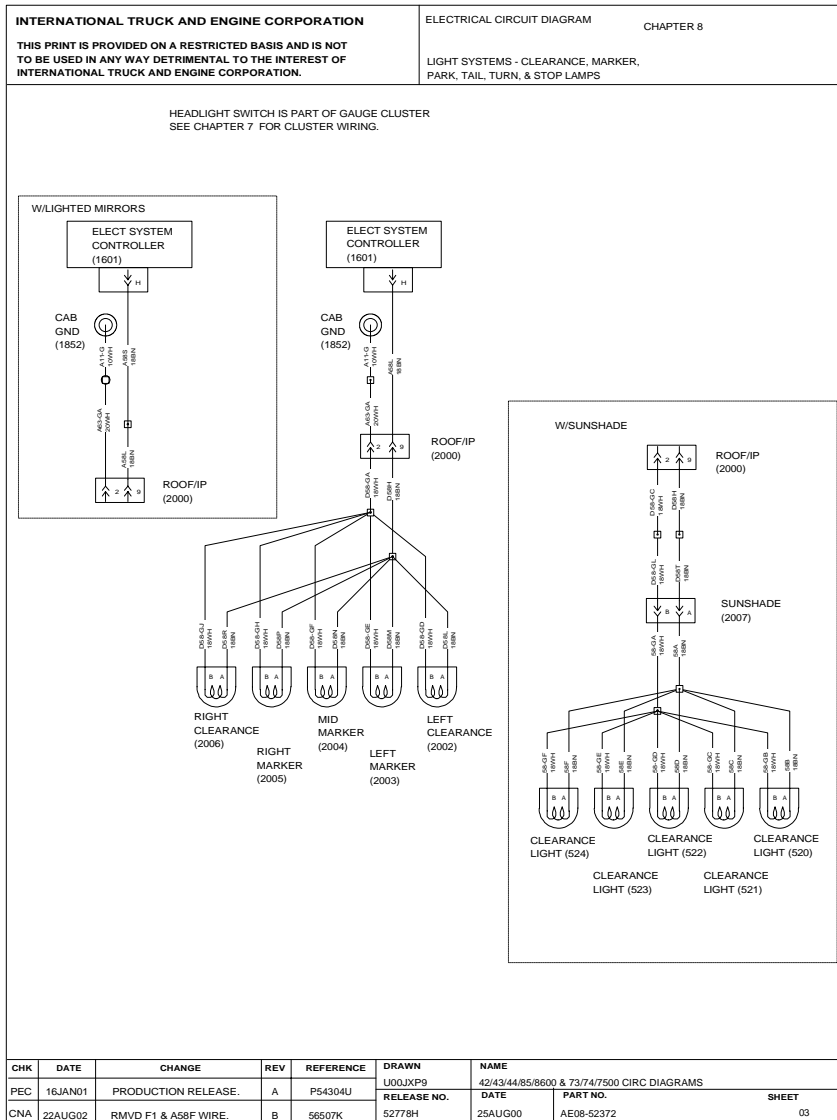


Figure 72 Light Systems — Clearance, Marker, Park, Tail, Turn and Stop Lamps (Cont.)

8.4. LIGHT SYSTEMS — TURN SIGNAL AND STOP SWITCHES, P. 4

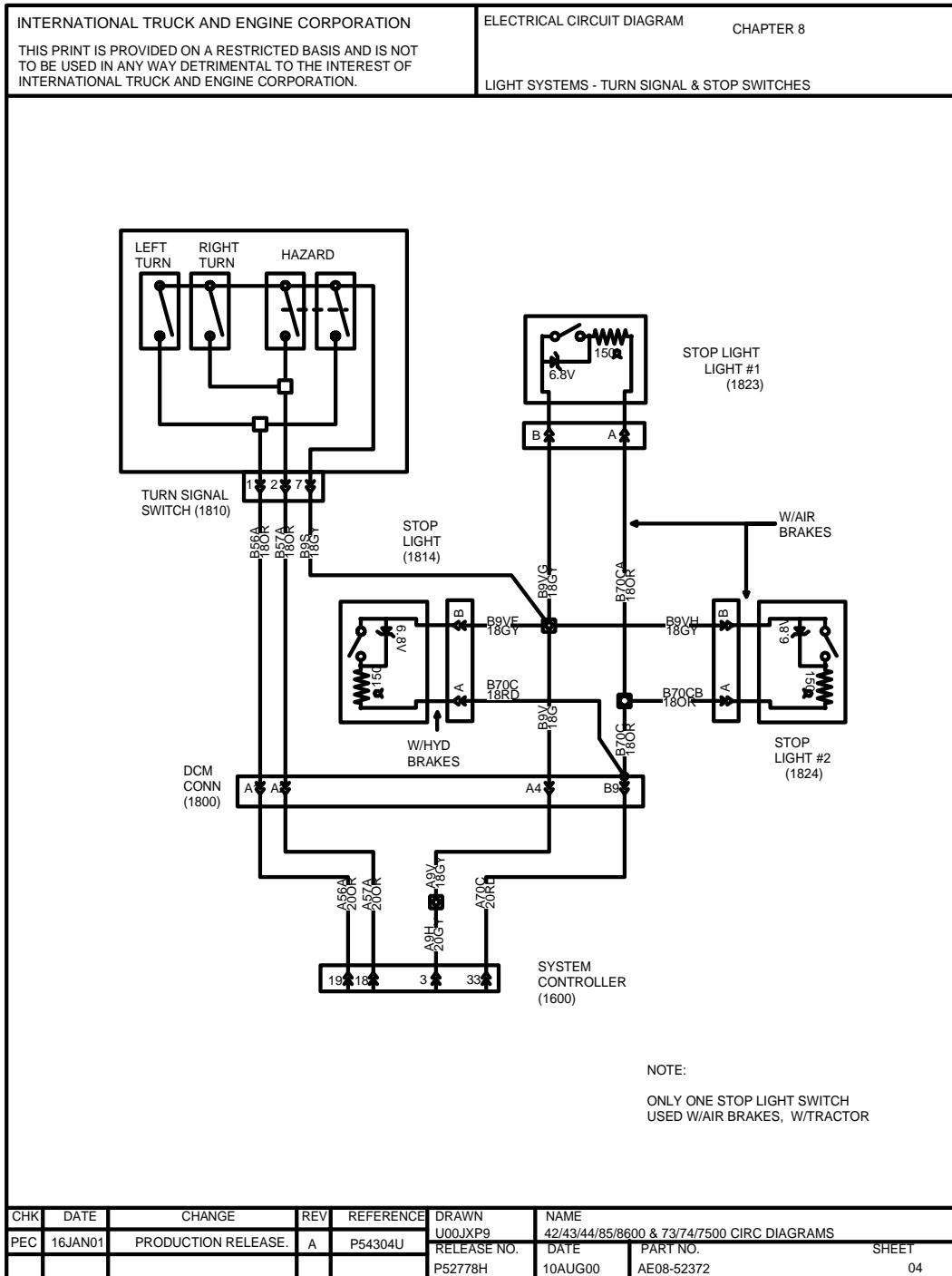


Figure 73 Light Systems — Turn Signal and Stop Switches

8.5. DOME LIGHT, MAP LIGHT, P. 5

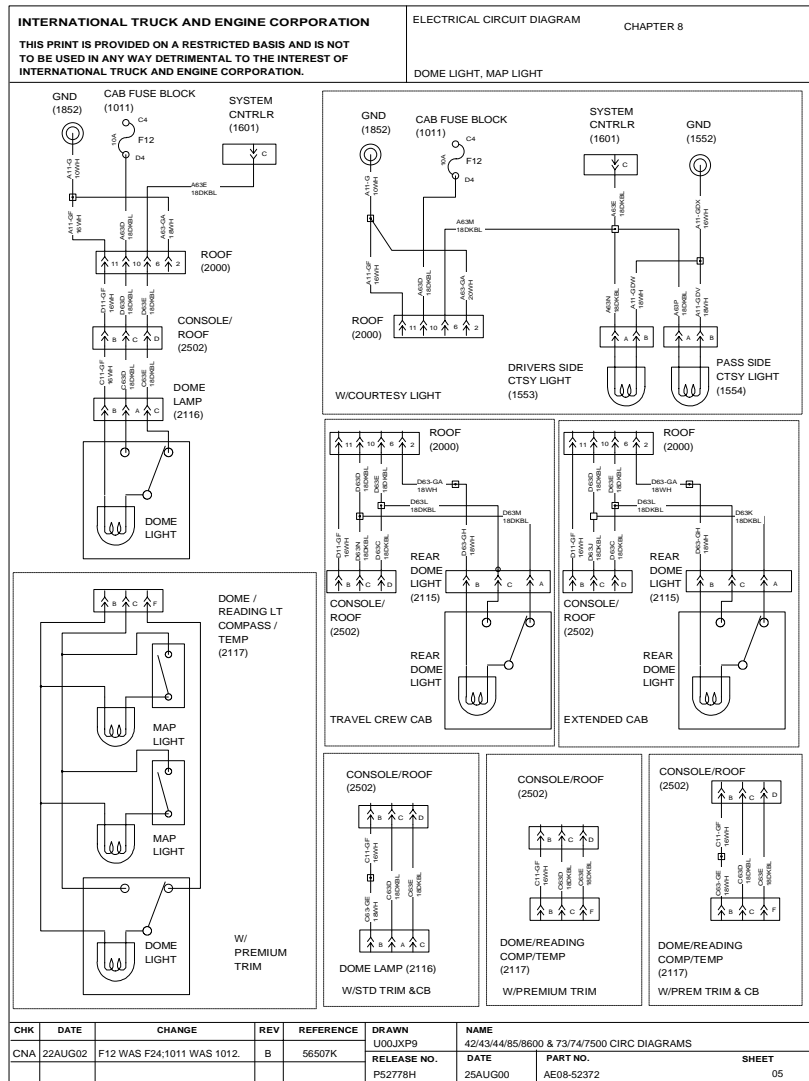


Figure 74 Dome Light, Map Light

8.6. DOME LIGHT, MAP LIGHT (CONT.), P. 6

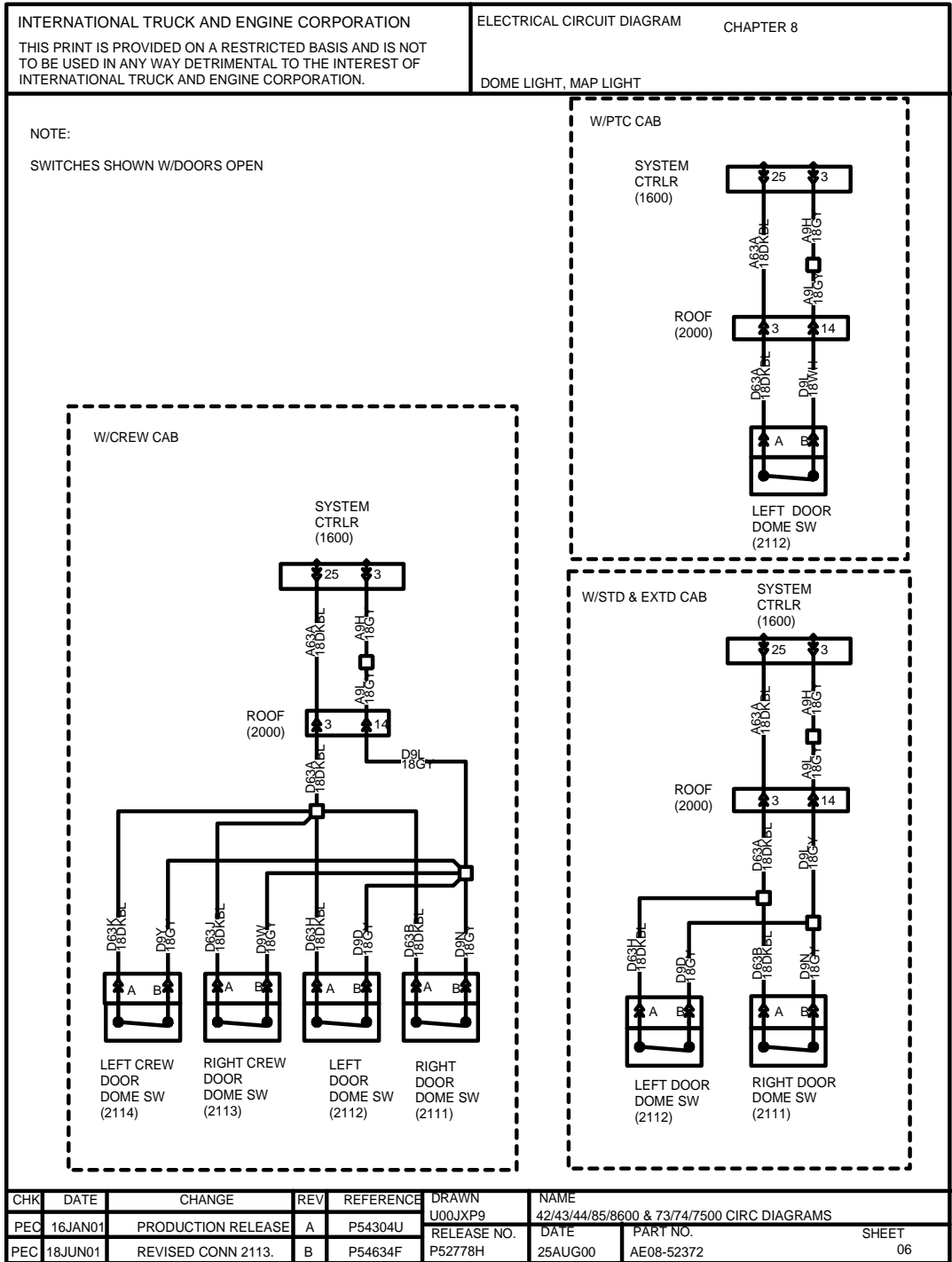


Figure 75 Dome Light, Map Light (Cont.)

8.7. FOG LIGHT AND WORK LIGHT, P. 7

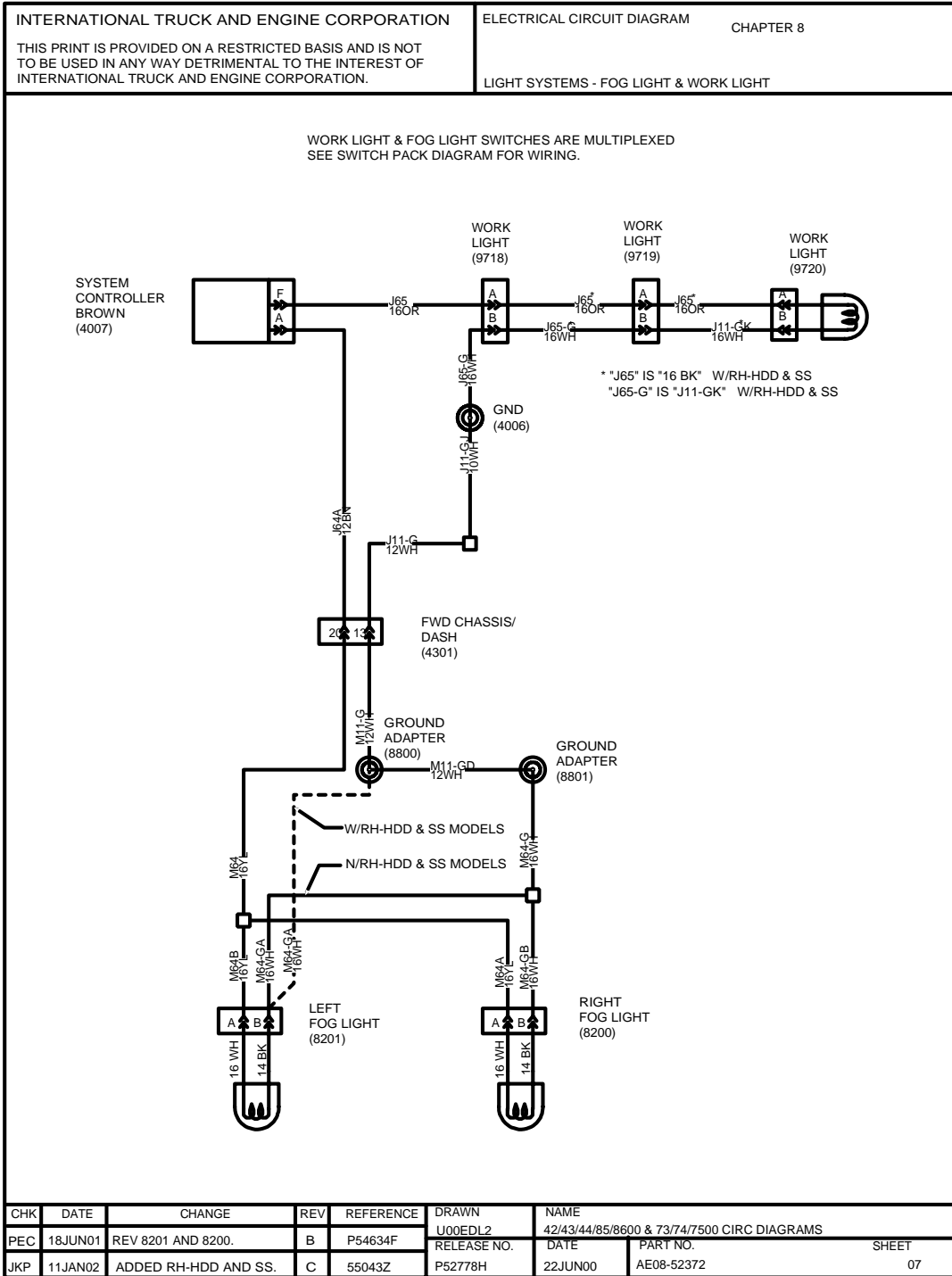


Figure 76 Fog Light and Work Light

8.8. HEADLIGHTS, P. 8

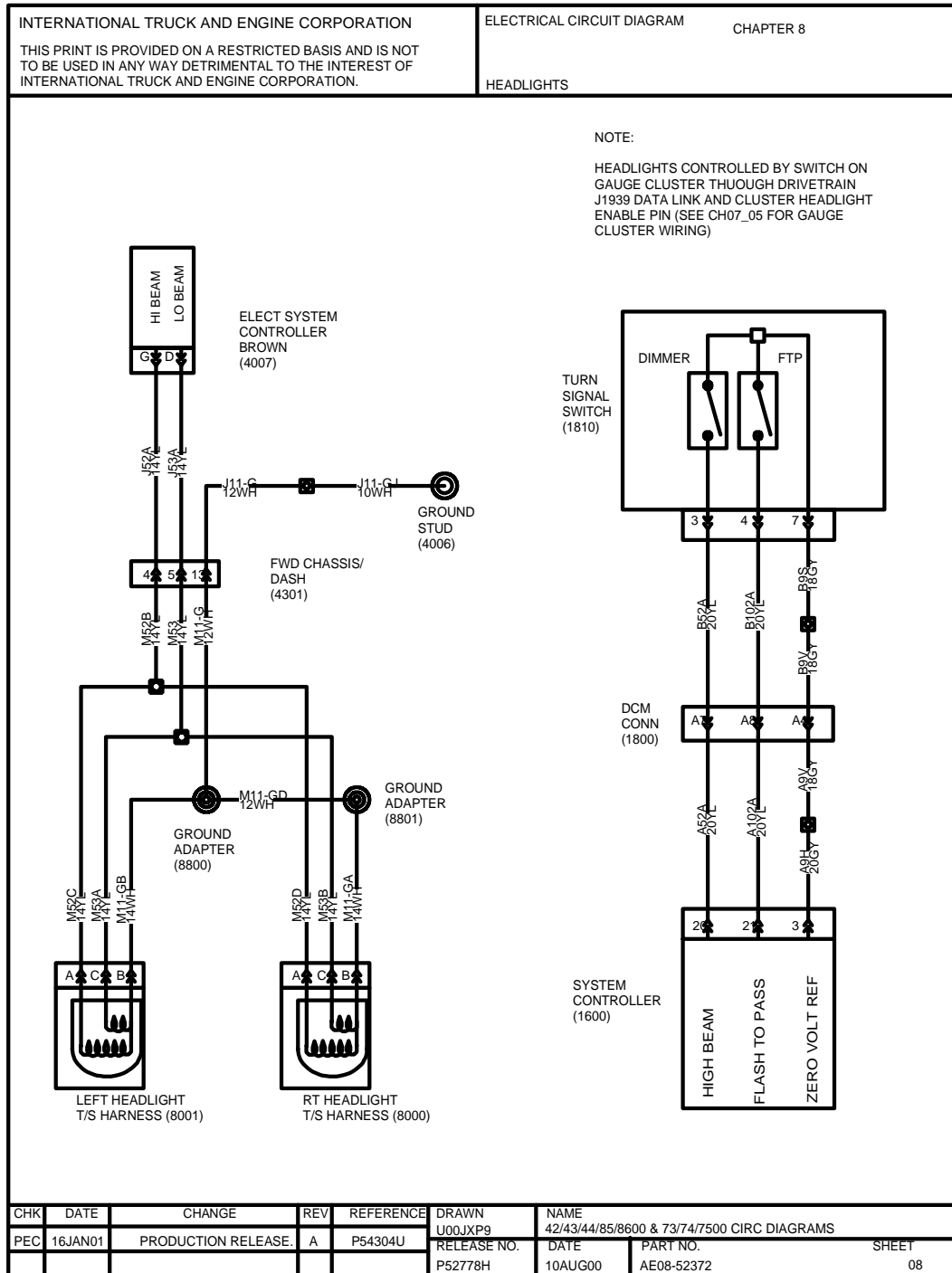


Figure 77 Headlights

8.9. AUX. HEADLIGHTS, AUX. PARK, AUX TURN, P. 9

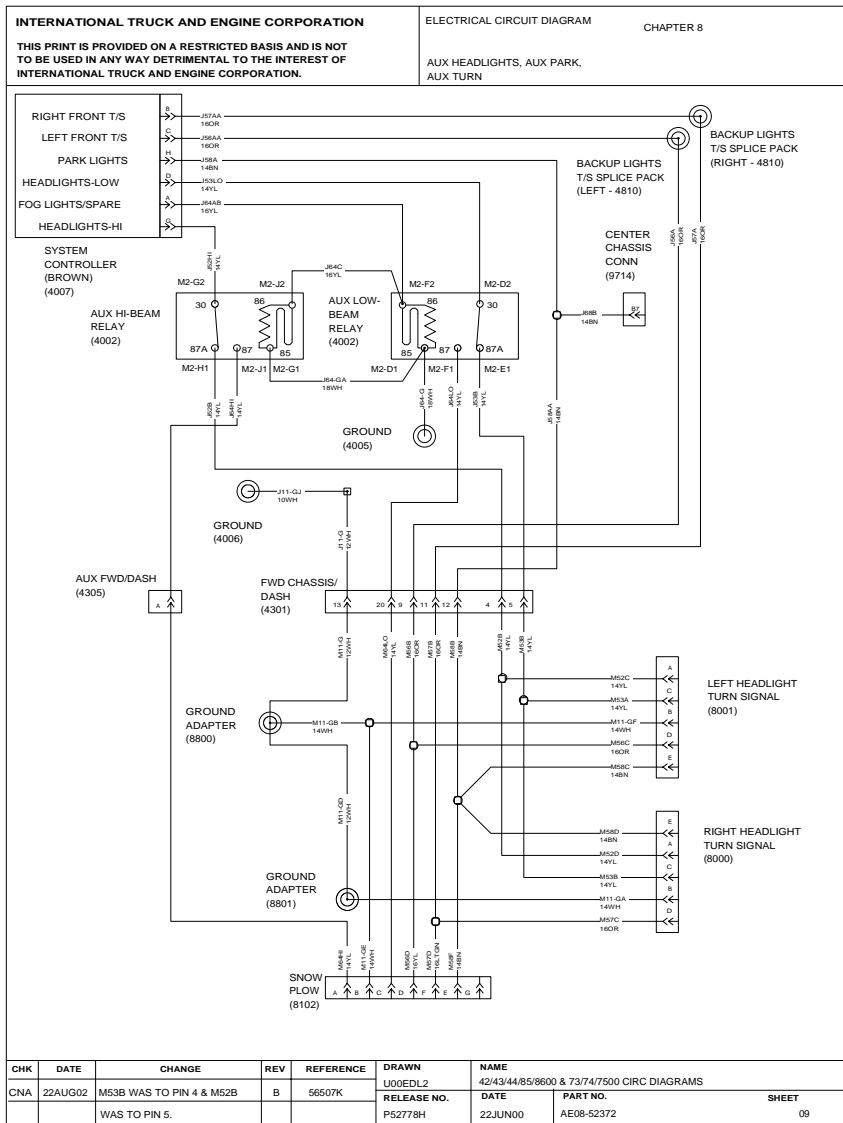


Figure 78 Aux. Headlights, Aux. Park, Aux Turn

8.10. PANEL LIGHTS, P. 10

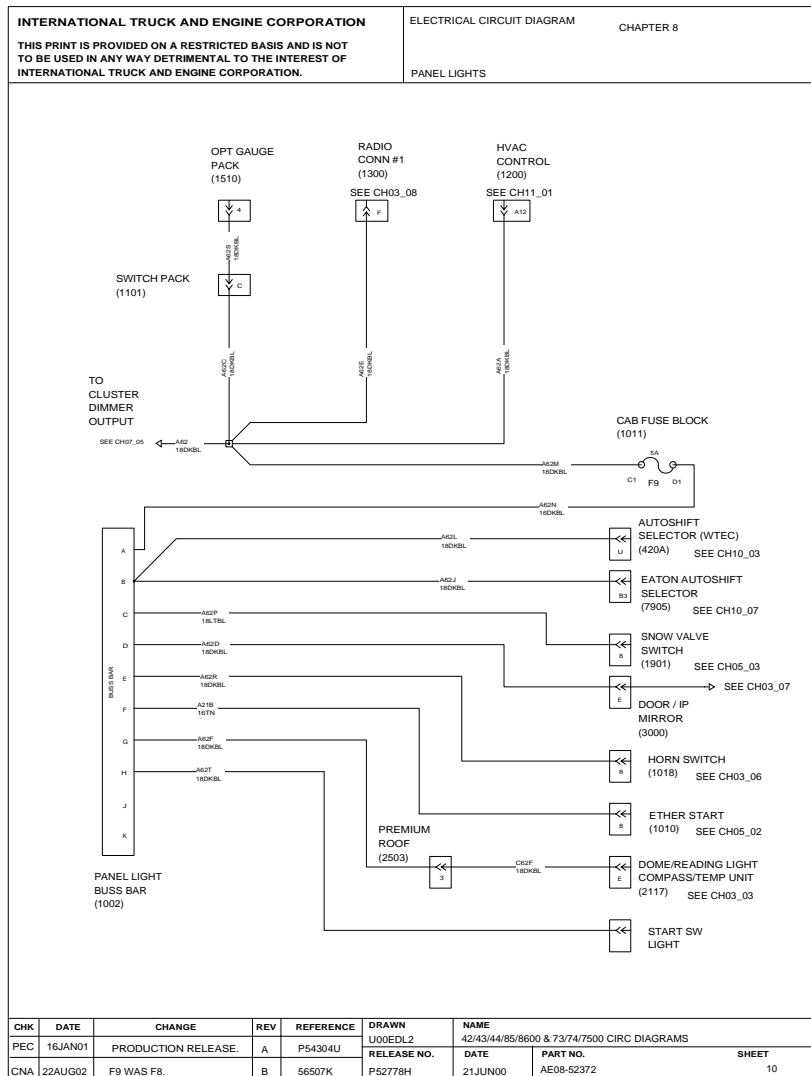


Figure 79 Panel Lights

9. CHASSIS ACCESSORIES (CHAPTER 9)

9.1. AIR DRYER AND HEATED DRAIN VALVE, P. 1

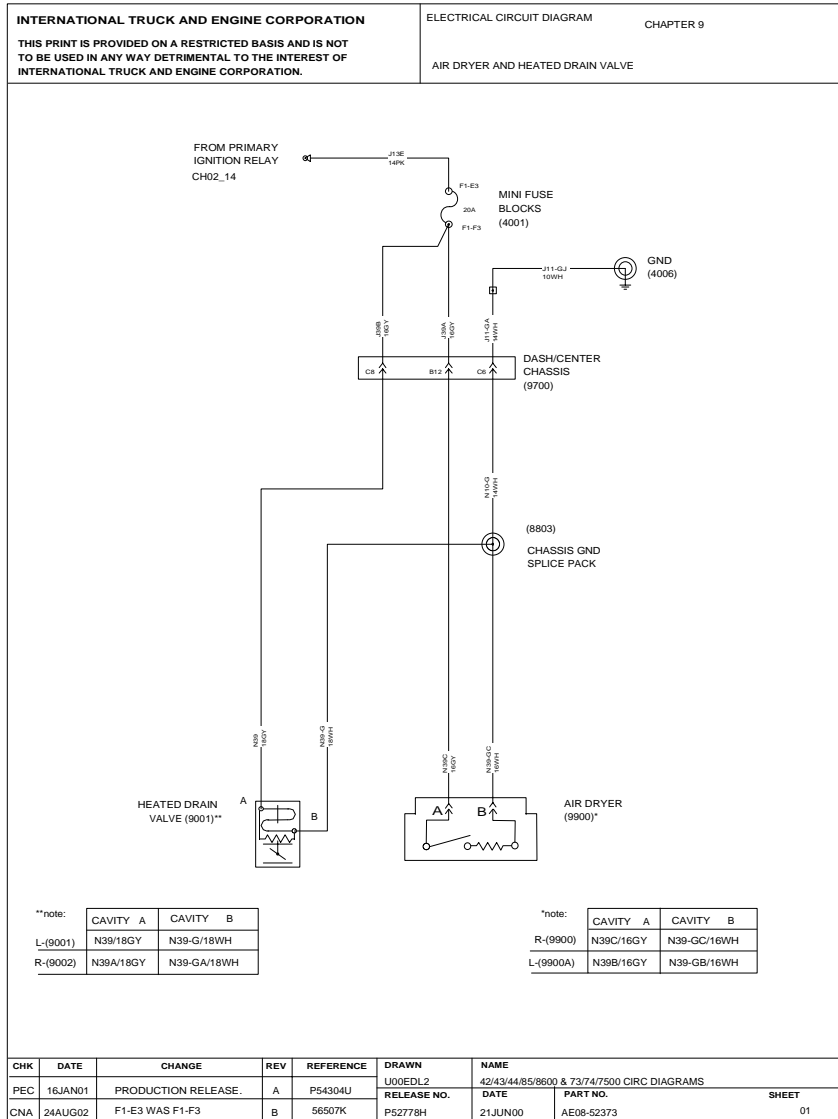


Figure 80 Air Dryer and Heated Drain Valve

9.2. ANTILOCK BRAKE SYSTEM (ABS), AIR, P. 2

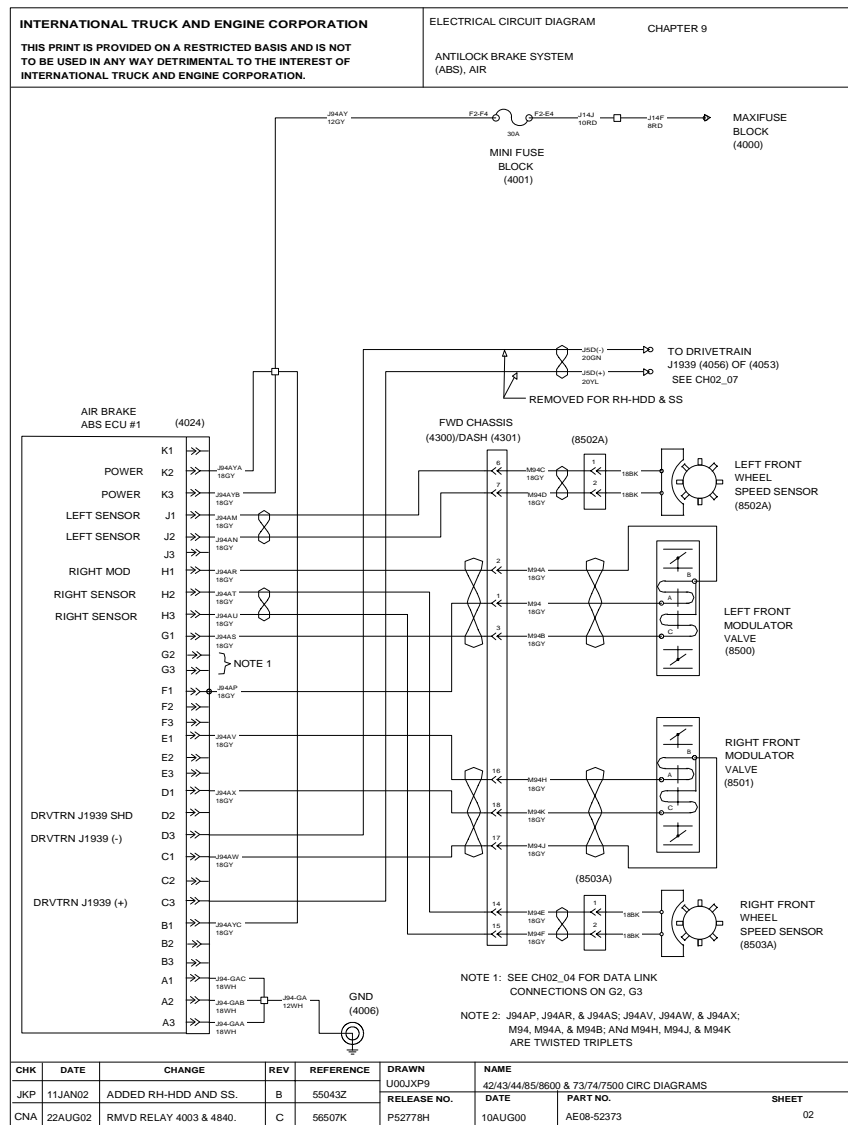


Figure 81 Antilock Brake System (ABS), Air

9.3. ANTILOCK BRAKE SYSTEM (ABS), AIR, TRACTION CONTROL, P. 3

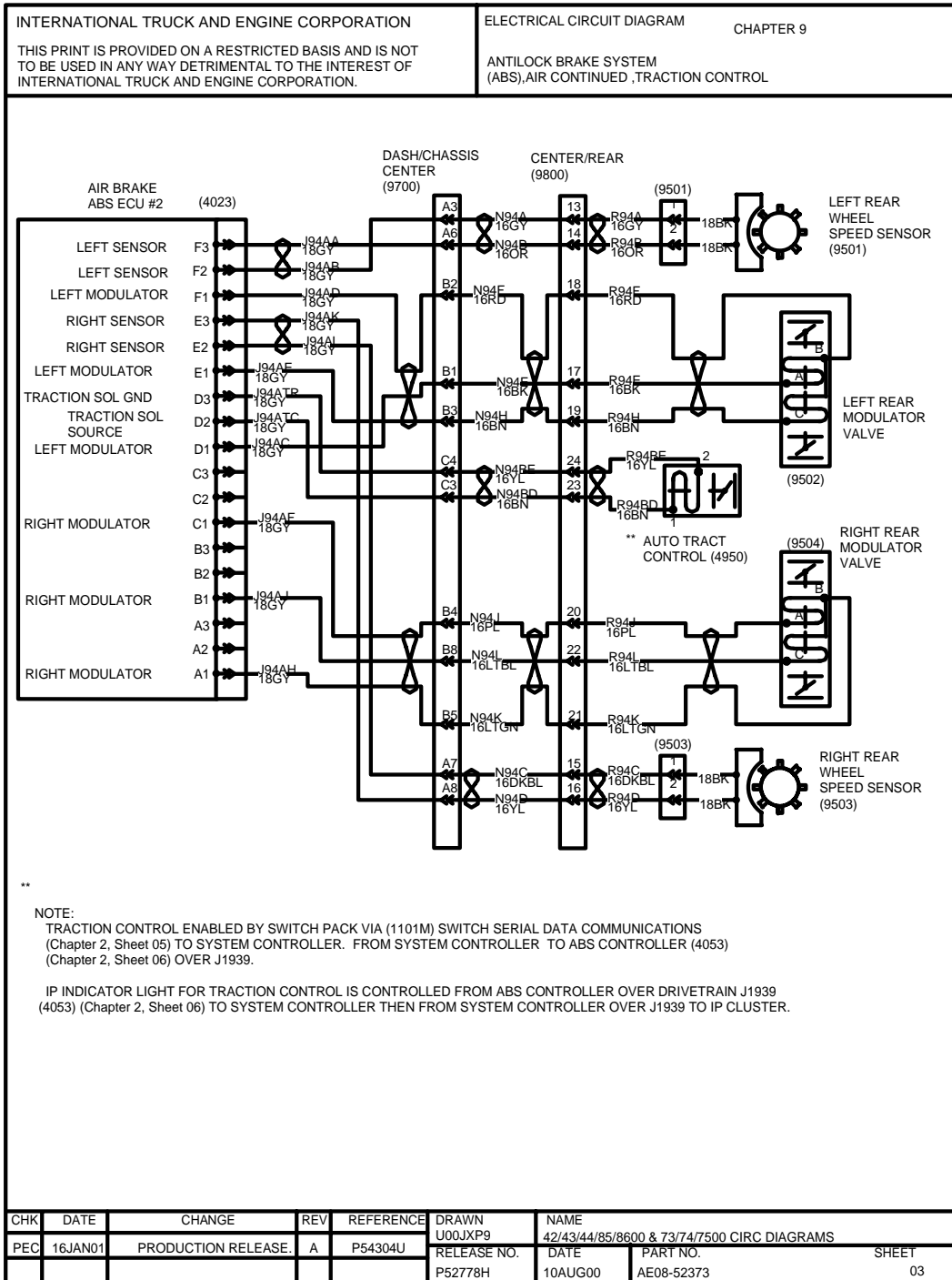


Figure 82 Antilock Brake System (ABS), Air, Traction Control

9.4. ANTILOCK BRAKE SYSTEM (ABS), HYDRAULIC, P. 4

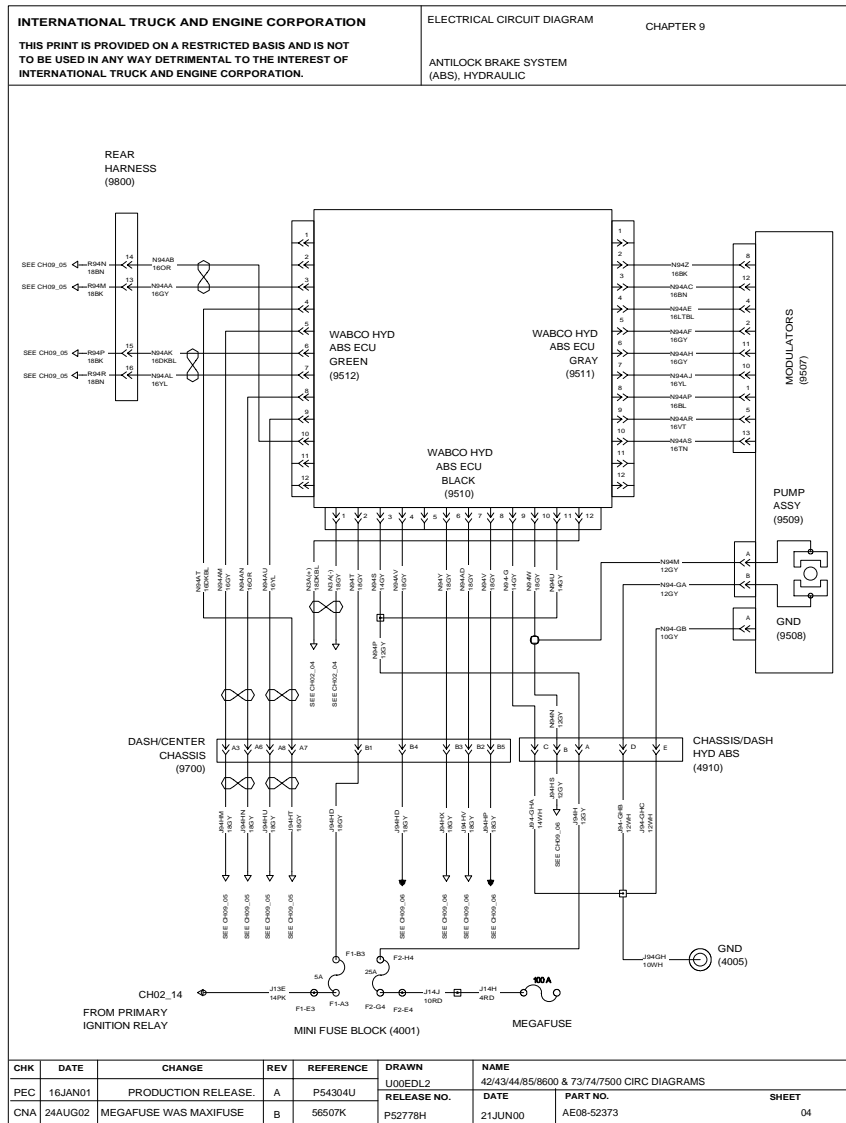


Figure 83 Antilock Brake System (ABS), Hydraulic

9.5. ANTILOCK BRAKE SYSTEM (ABS), HYDRAULIC (CONT.), P. 5

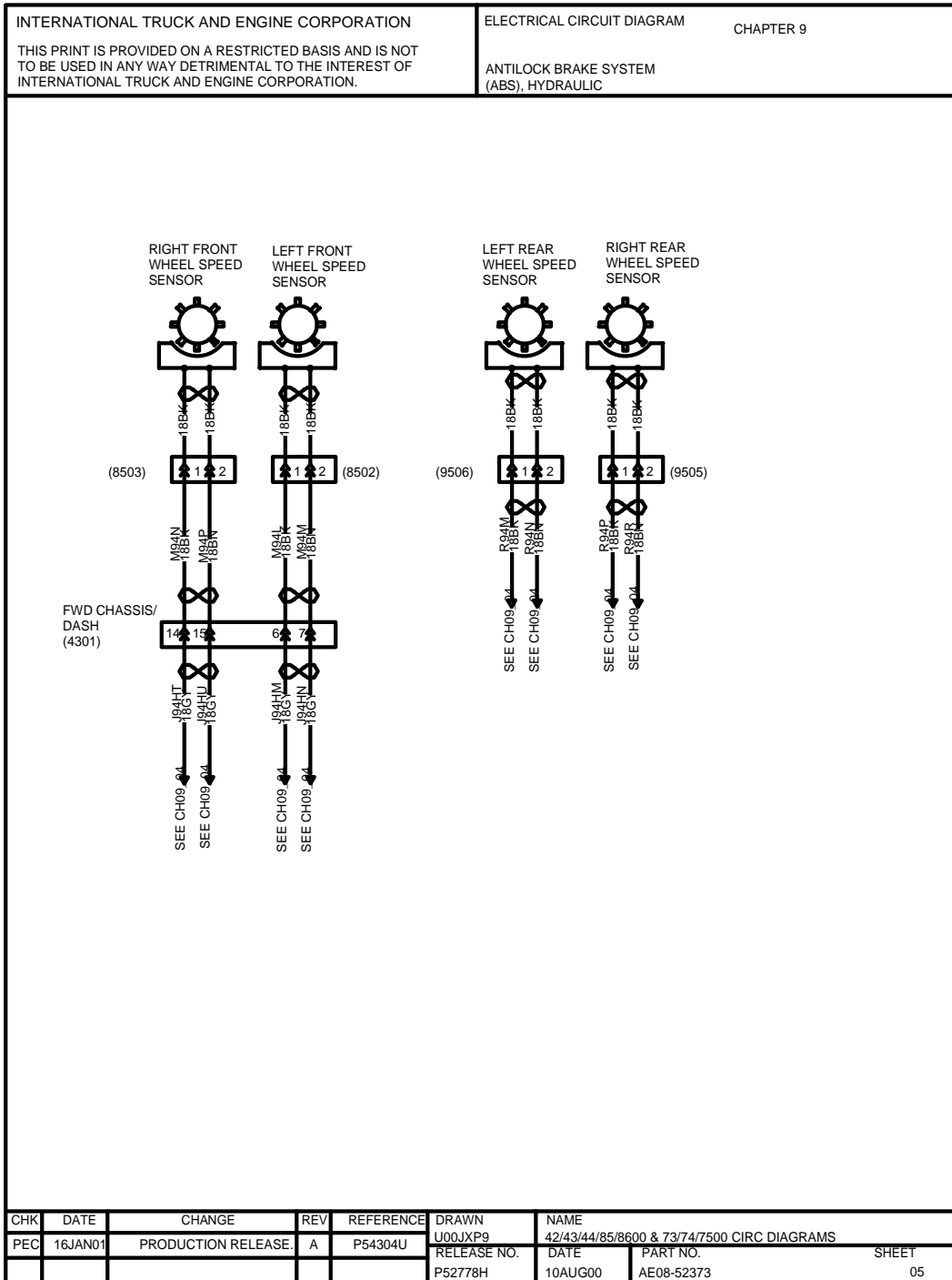


Figure 84 Antilock Brake System (ABS), Hydraulic (Cont.)

9.6. ANTILOCK BRAKE SYSTEM (ABS), HYDRAULIC (CONT.), P. 6

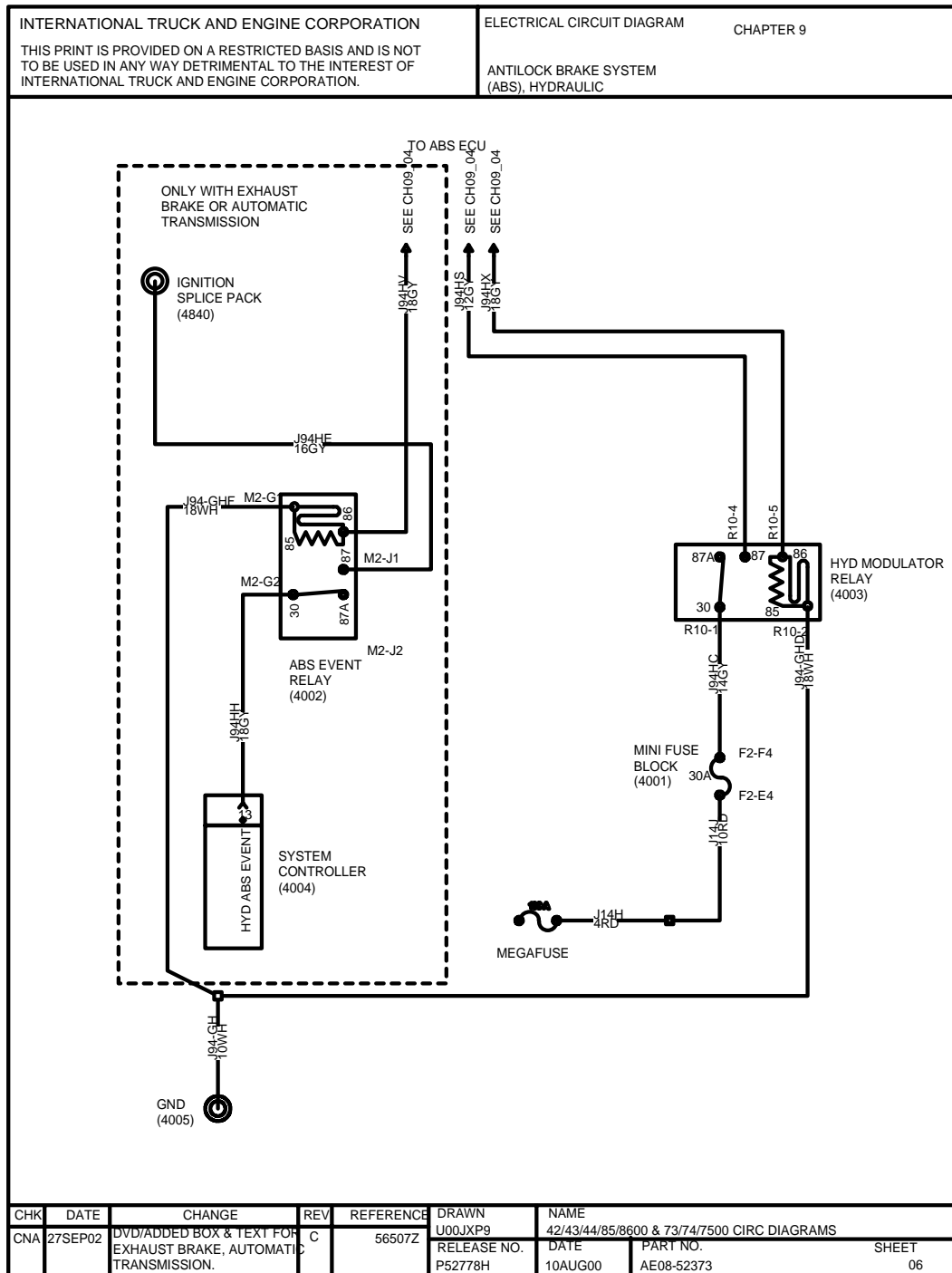


Figure 85 Antilock Brake System (ABS), Hydraulic (Cont.)

9.7. TWO SPEED AXLE SWITCH W/MANUAL TRANSMISSION FUEL HEATER N/WARN LIGHTS, P. 7

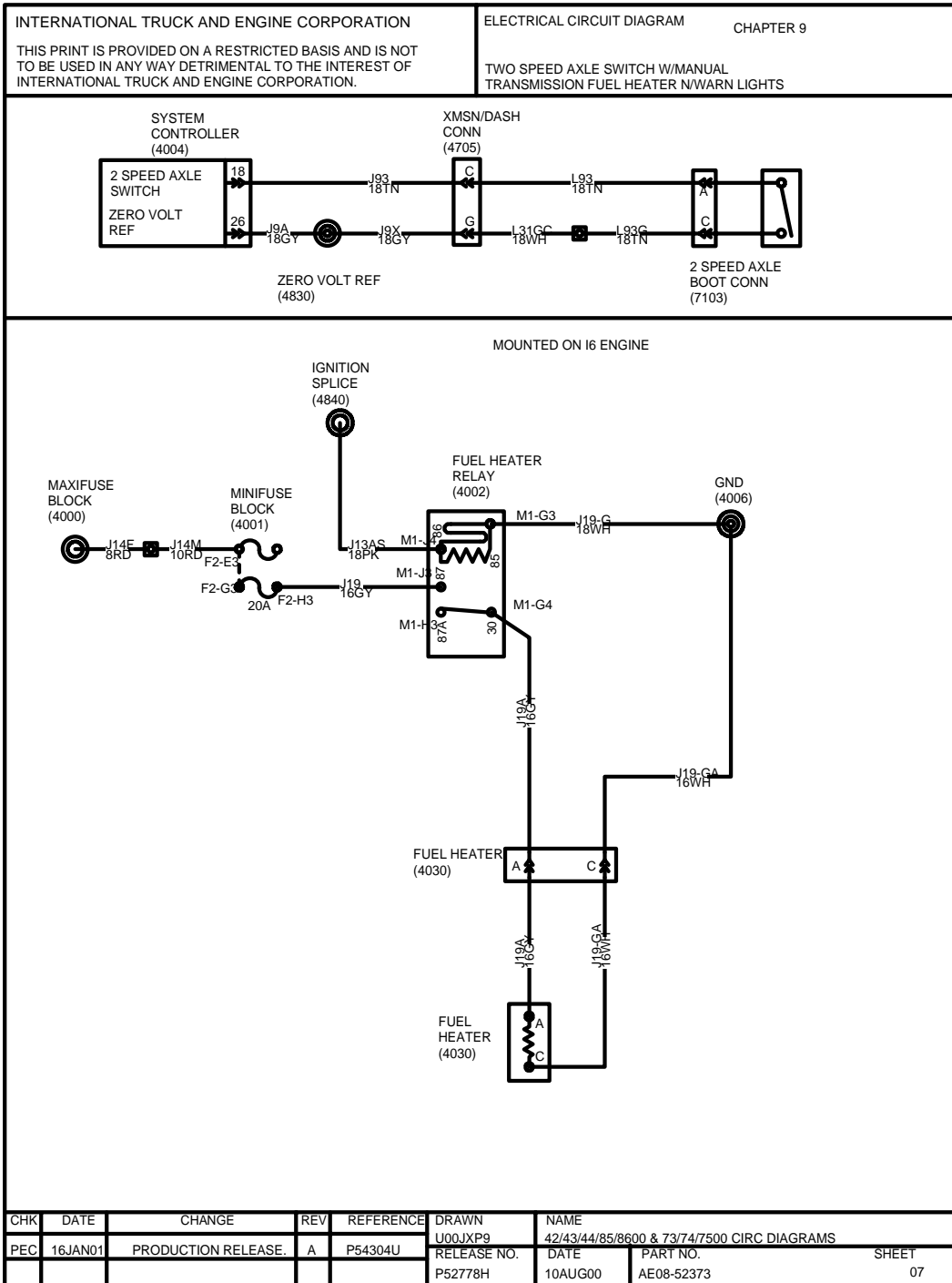


Figure 86 Two Speed Axle Switch W/Manual Transmission Fuel Heater N/Warn Lights

9.8. BRAKE SYSTEM, HYDRAULIC, P. 8

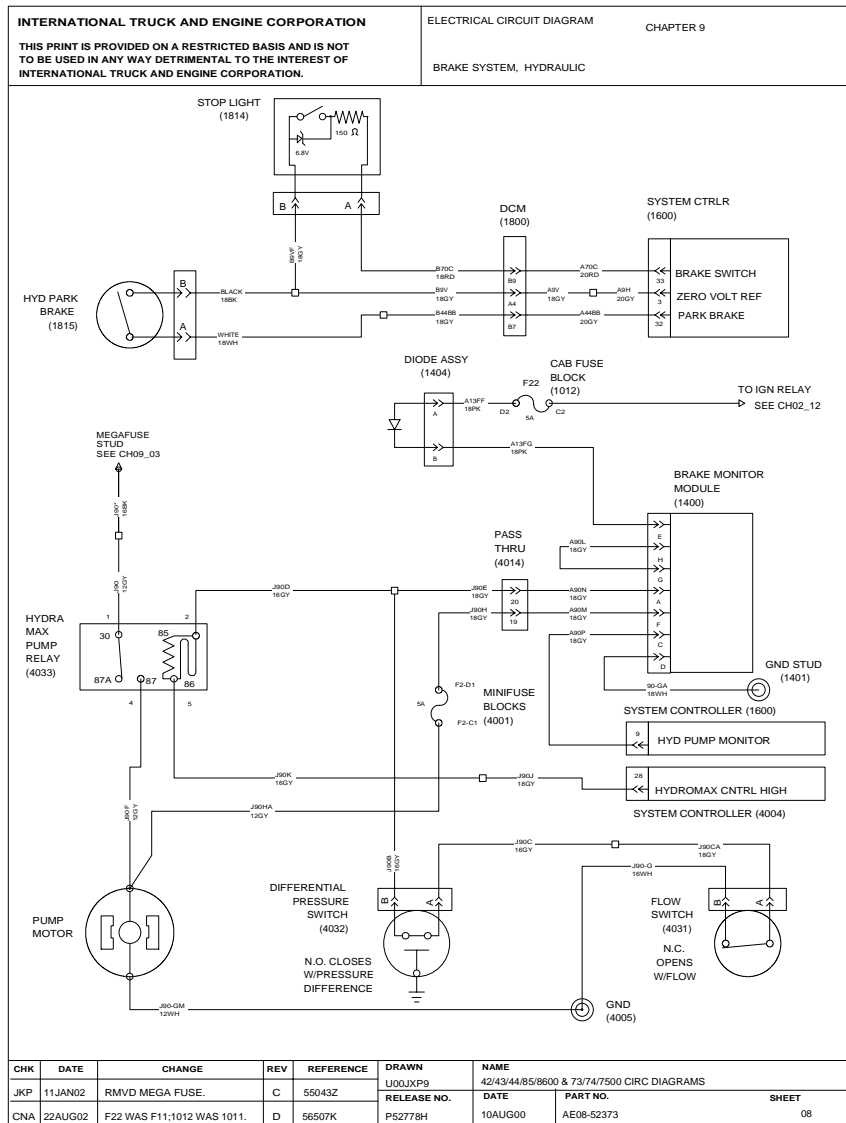


Figure 87 Brake System, Hydraulic

9.9. FUEL TRANSFER PUMP, P. 9

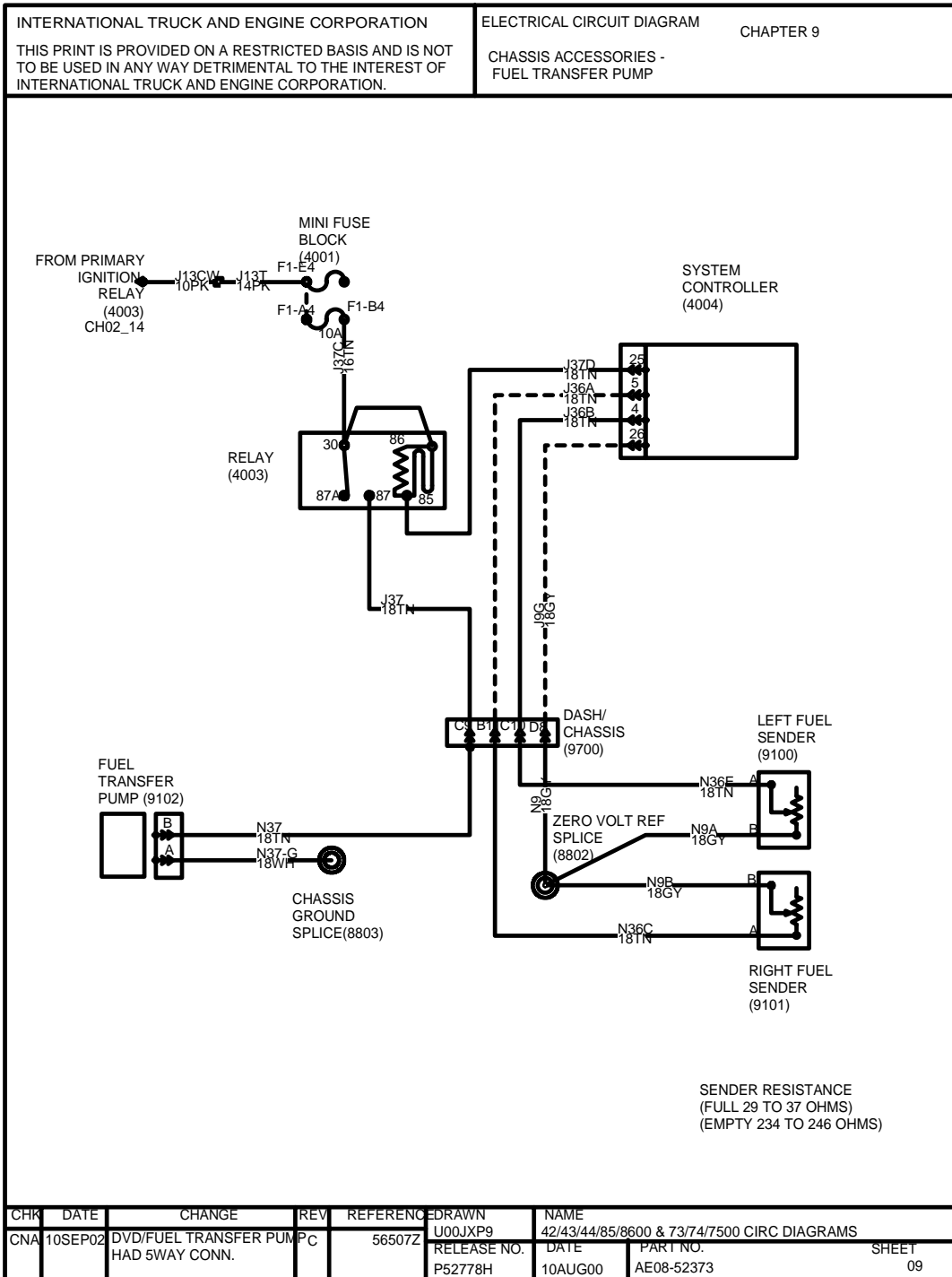


Figure 88 Fuel Transfer Pump

9.10. BACK OF CAB BODY BUILDER AND TRAILER STOP, TAIL, MARKER, P. 10

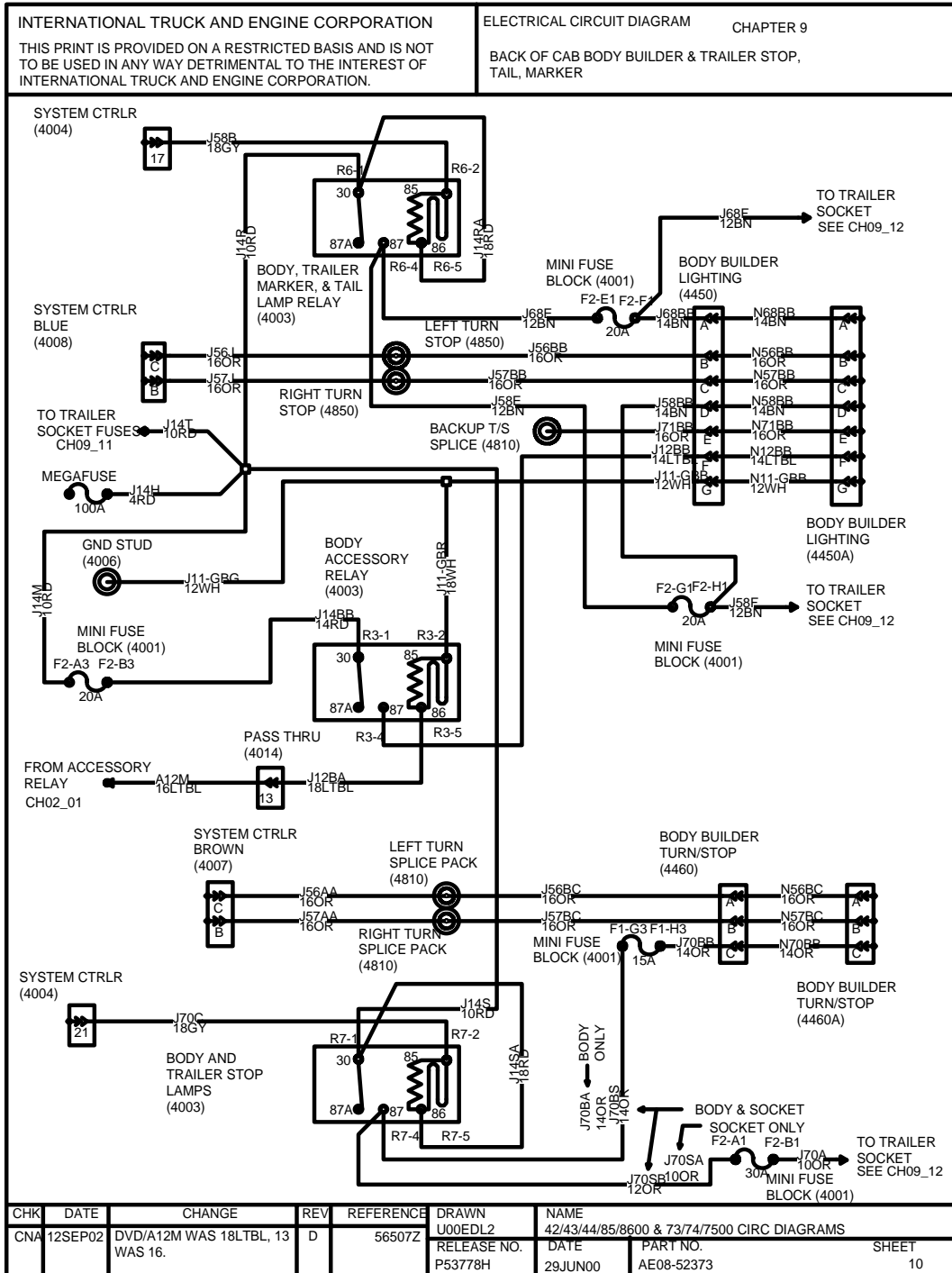


Figure 89 Back of Cab Body Builder and Trailer Stop, Tail, Marker

9.11. BODY BUILDER AND TRAILER TURNS, CENTER PIN ABS, CENTER PIN AUX, P. 11

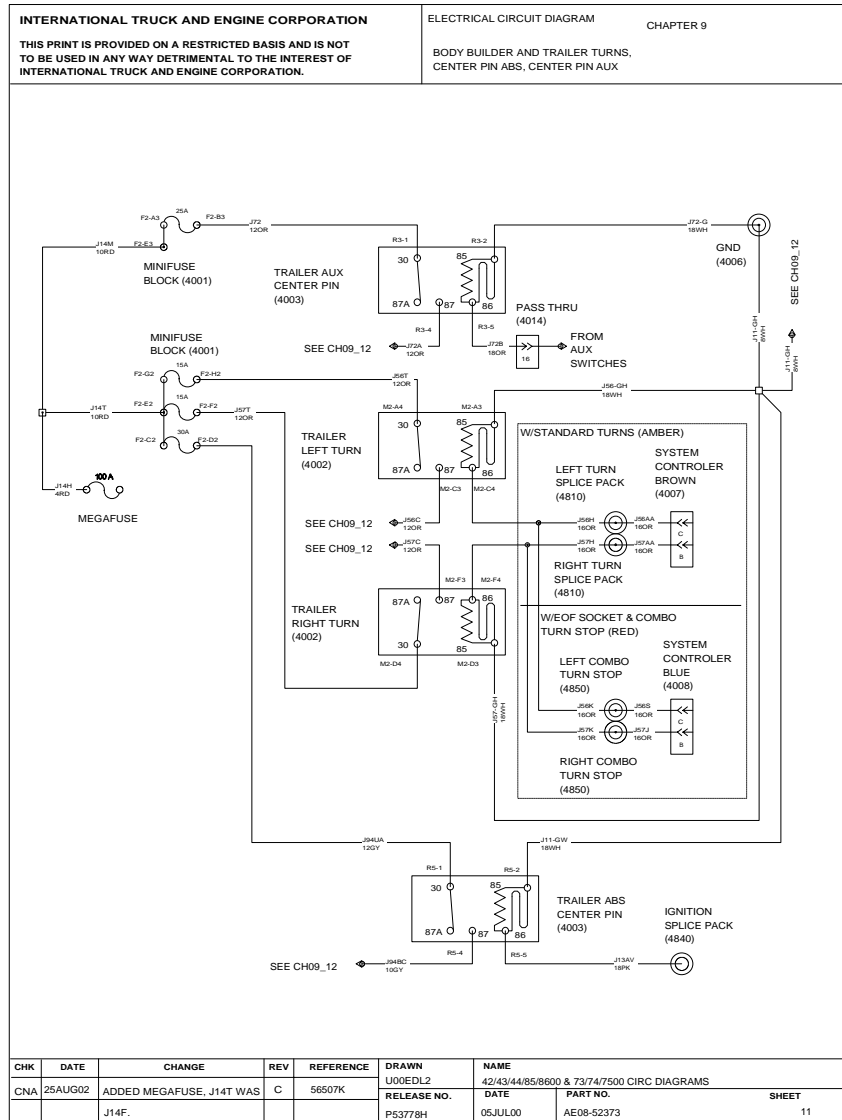


Figure 90 Body Builder and Trailer Turns, Center Pin ABS, Center Pin Aux

9.12. BODY BUILDER AND TRAILER SOCKET BACK OF CAB SOCKETS, P. 12

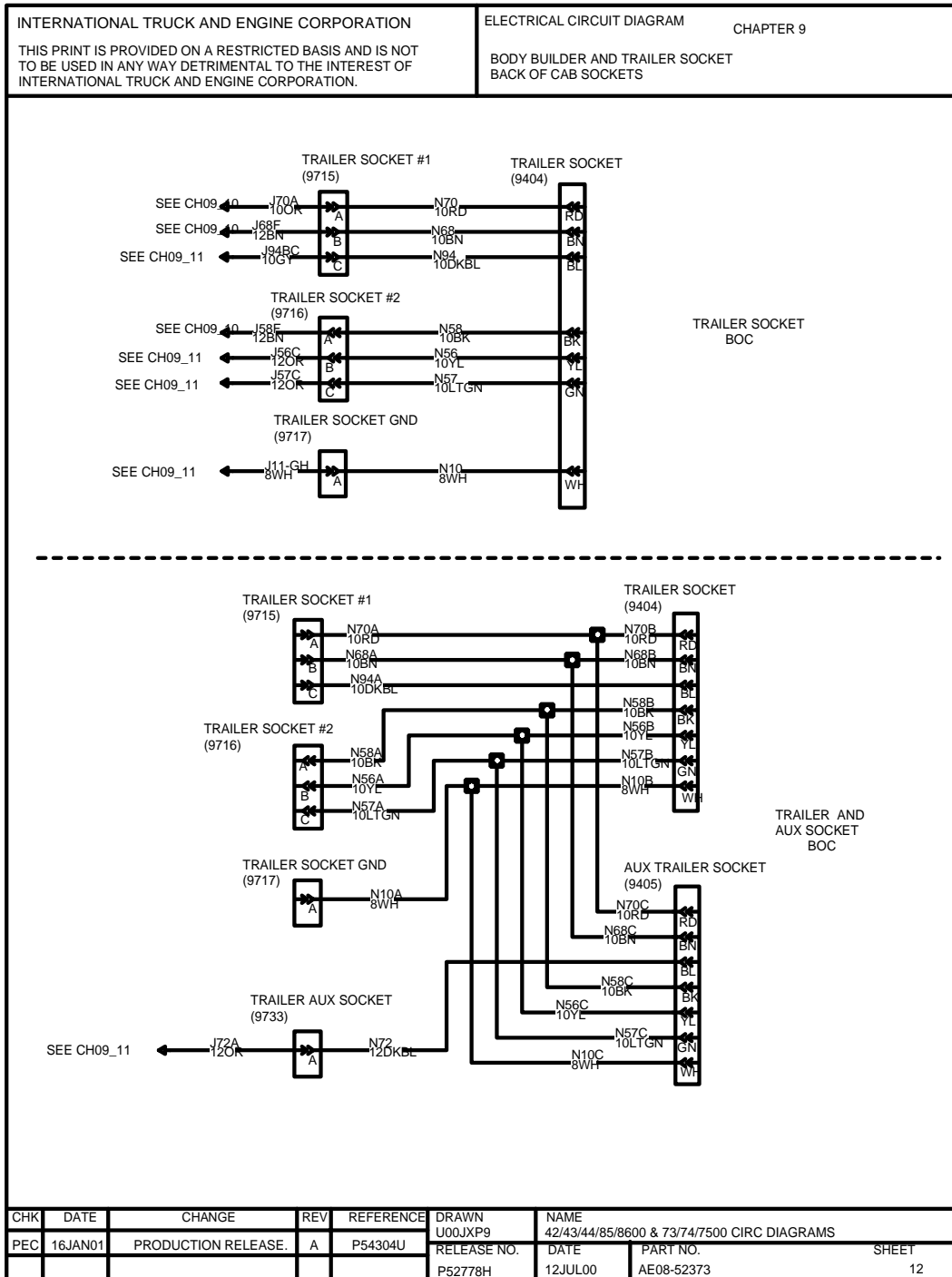


Figure 91 Body Builder and Trailer Socket Back of Cab Sockets

9.13. BODY BUILDER AND TRAILER SOCKET END OF FRAME (EOF) SOCKET AND BODY BUILDER, P. 13

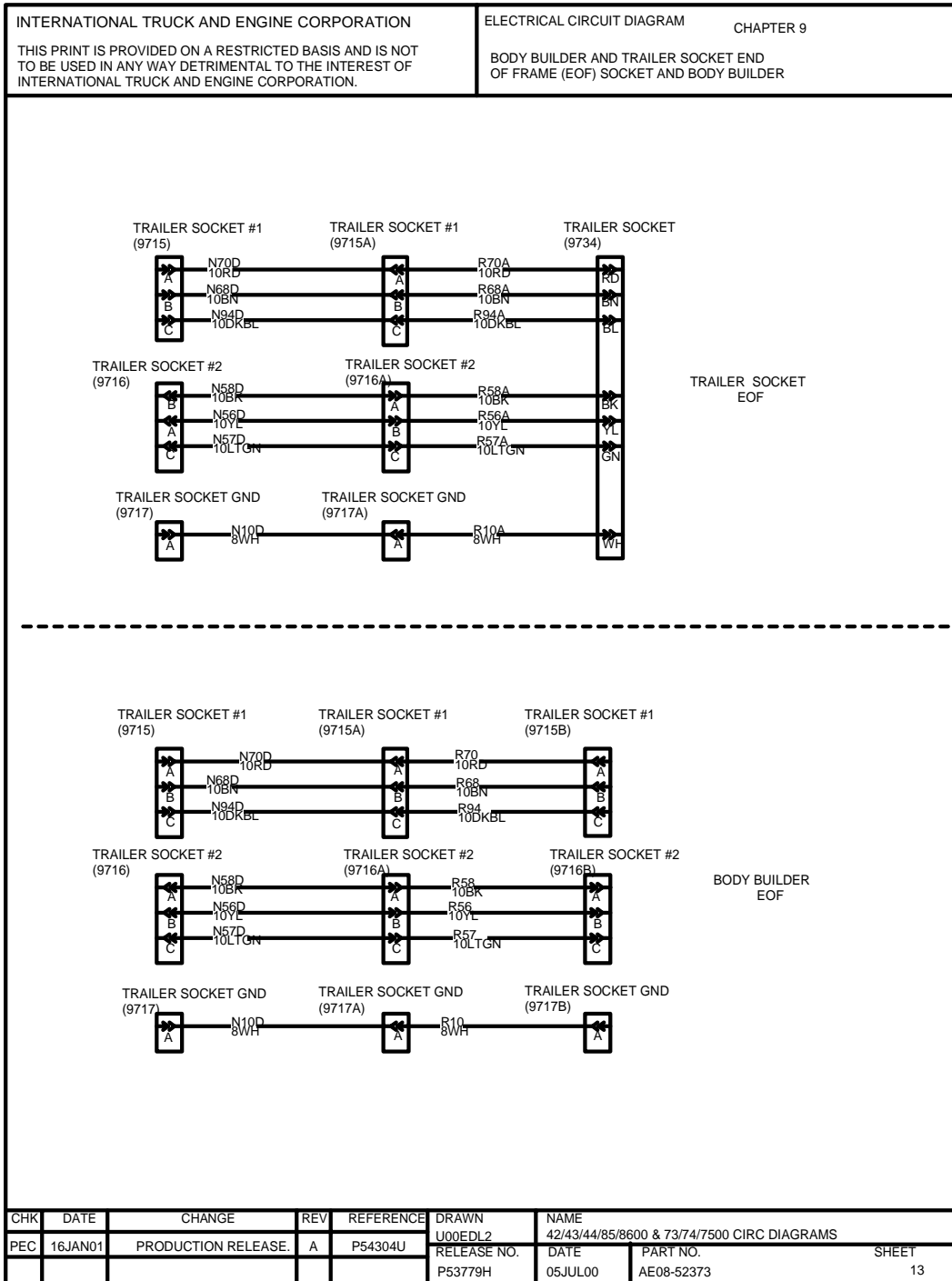


Figure 92 Body Builder and Trailer Socket End of Frame (EOF) Socket and Body Builder

9.14. AIR SOLENOID 4-WAY PACK, P. 14

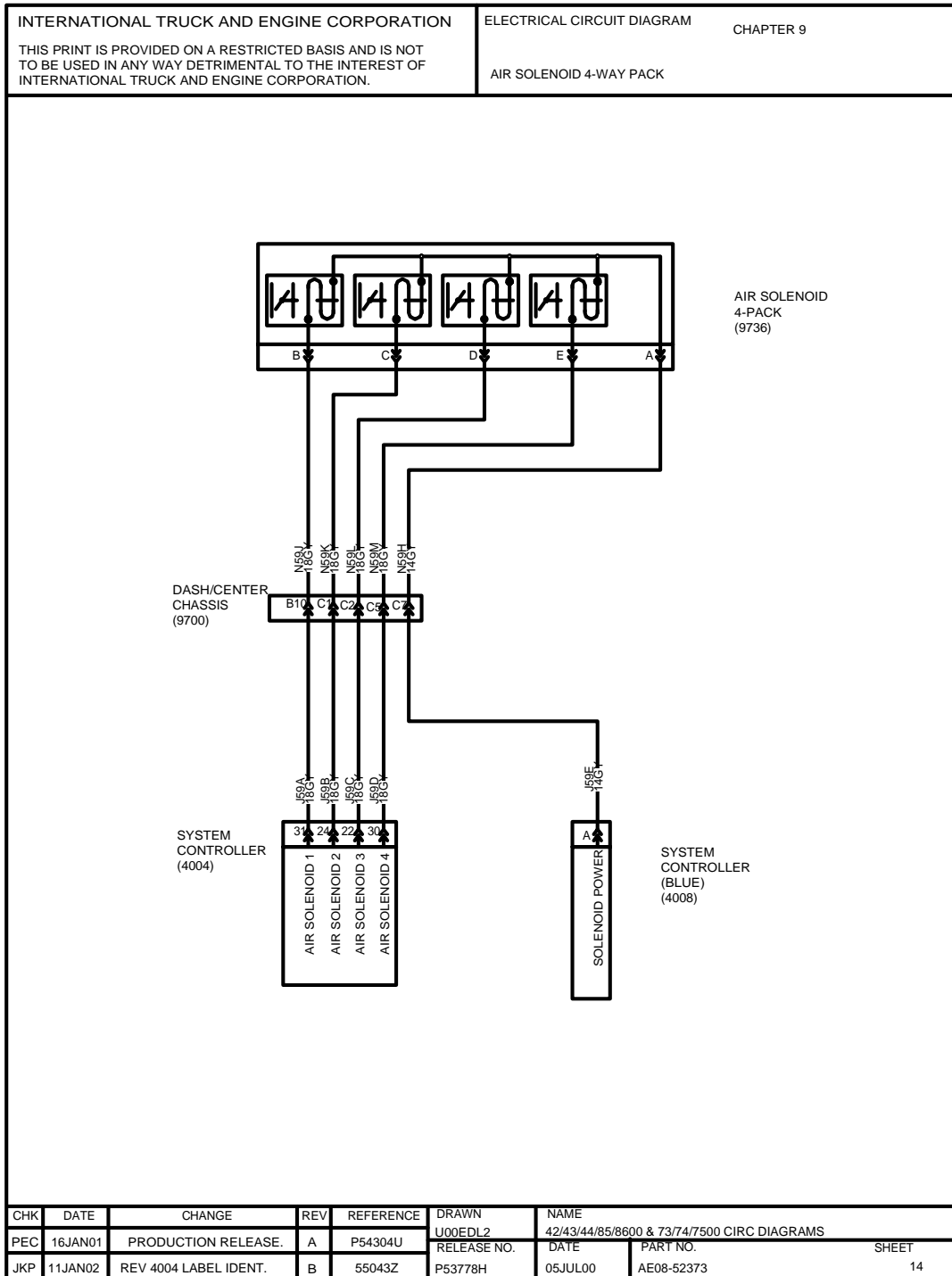


Figure 93 Air Solenoid 4-Way Pack

9.15. REMOTE POWER UNITS, SOLENOID PACKS, REMOTE ENGINE SPEED CONTROLLER, P. 15

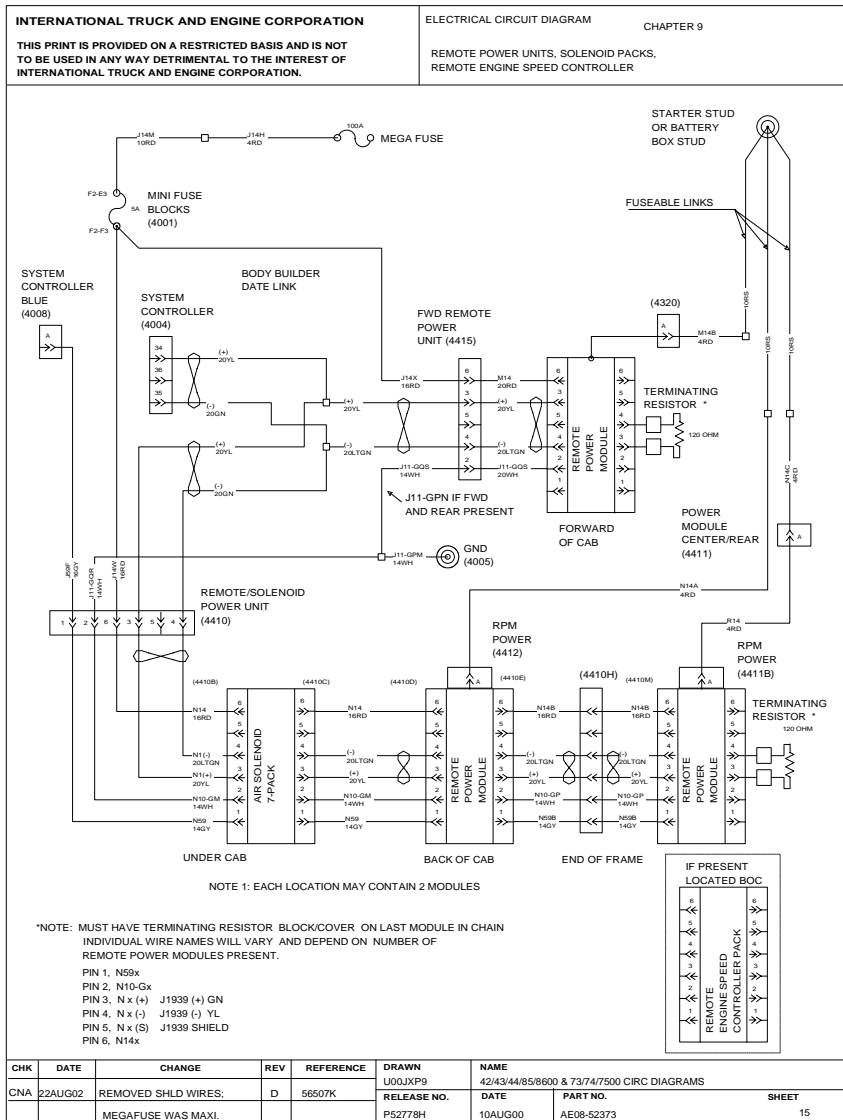


Figure 94 Remote Power Units, Solenoid Packs, Remote Engine Speed Controller

9.16. HYD POWER PARK, P. 16

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DIAGRAM NOT AVAILABLE							
CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME	
PEC	16JAN01	PRODUCTION RELEASE.	A	P54304U	U00EDL2	42/43/44/85/8600 & 73/74/7500 CIRC DIAGRAMS	
					RELEASE NO.	DATE	PART NO.
					P52778H	10JUL00	AE08-52373
							SHEET 16

Figure 95 HYD Power Park

9.17. AIR SUSPENSION, P. 17

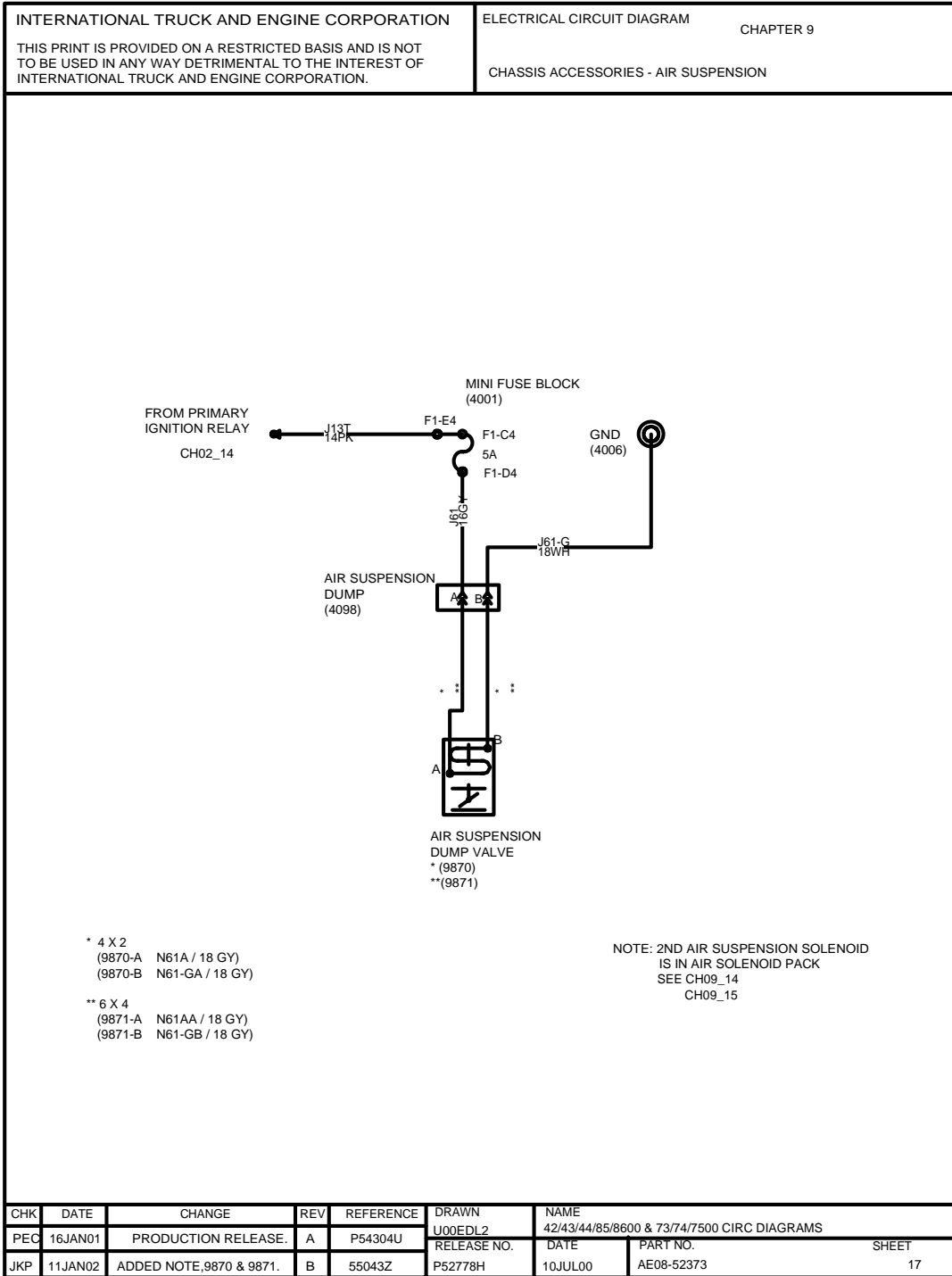


Figure 96 Air Suspension

9.18. AUX. TRAILER, ACC CONTROLLED, P. 18

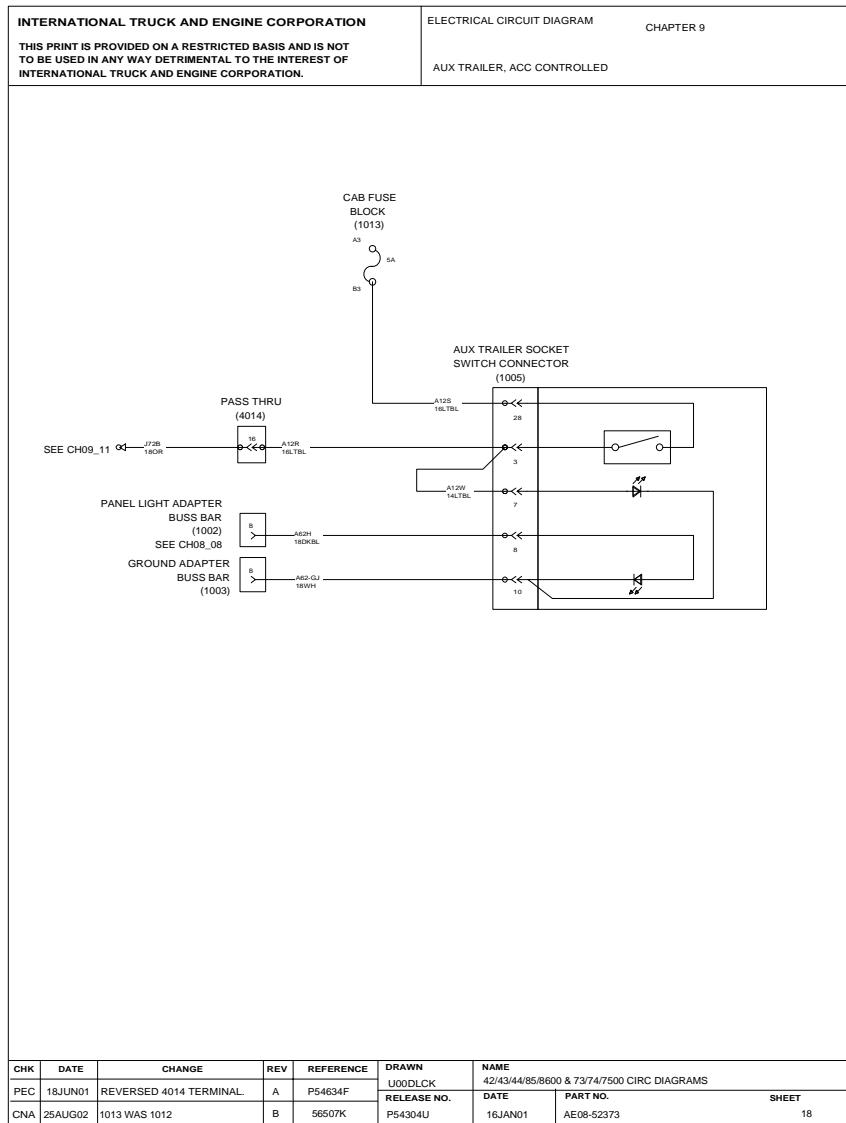


Figure 97 Aux. Trailer, Acc Controlled

9.19. AUX. TRAILER, BTRY CONTROLLED, P. 19

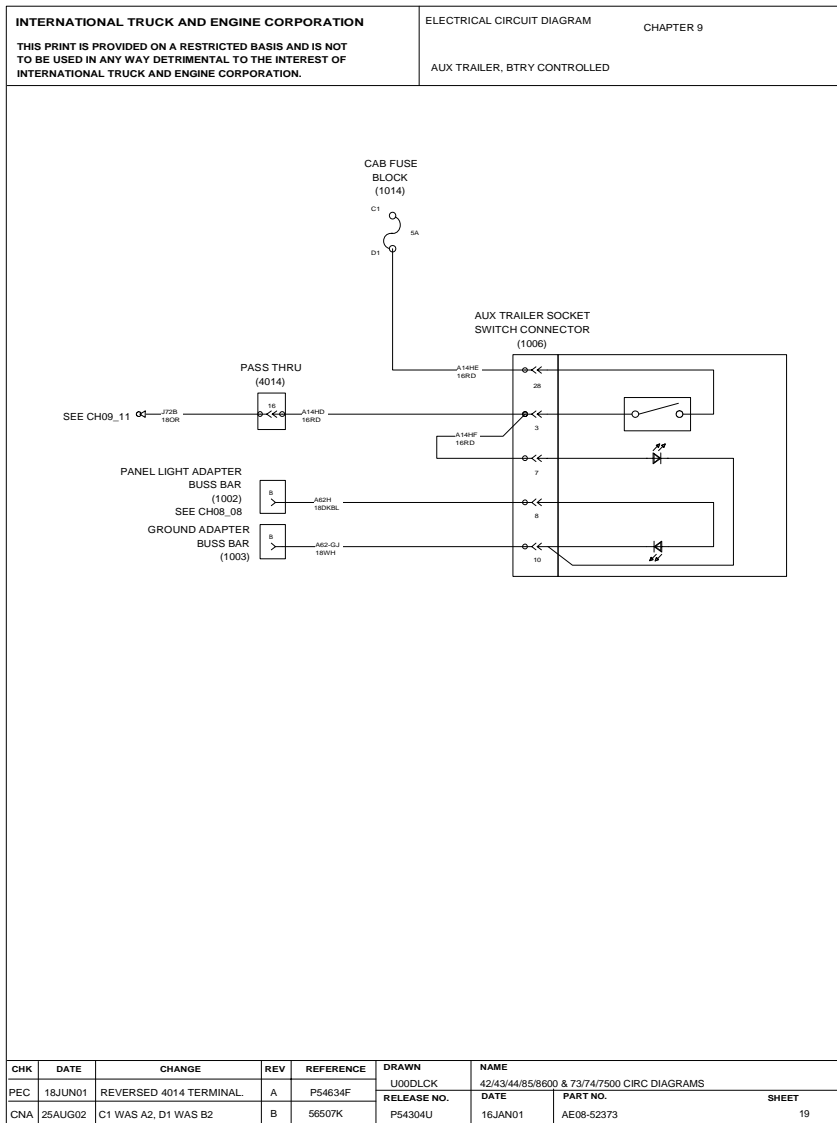


Figure 98 Aux. Trailer, Btry Controlled

9.20. LIFT AXLES (NON-STEERABLE), P. 20

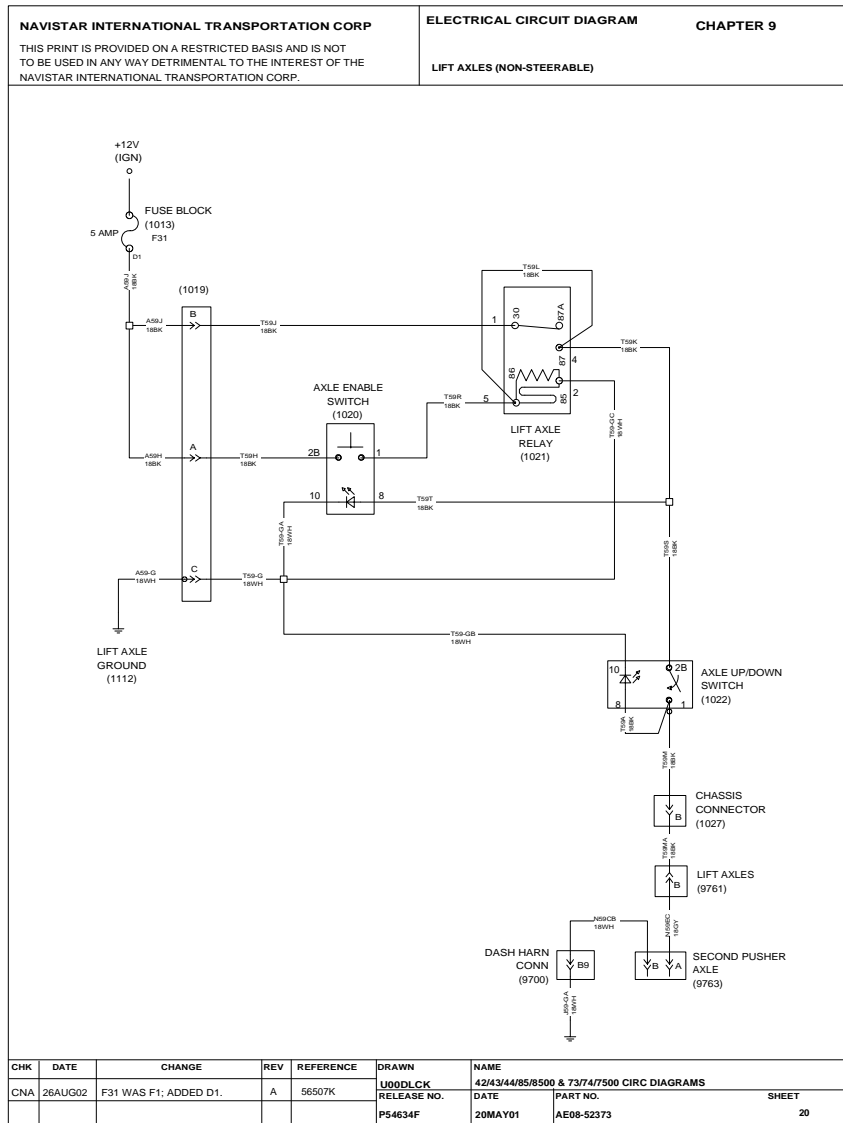


Figure 99 Lift Axles (Non-Steerable)

9.21. LIFT AXLES (STEERABLE), P. 21

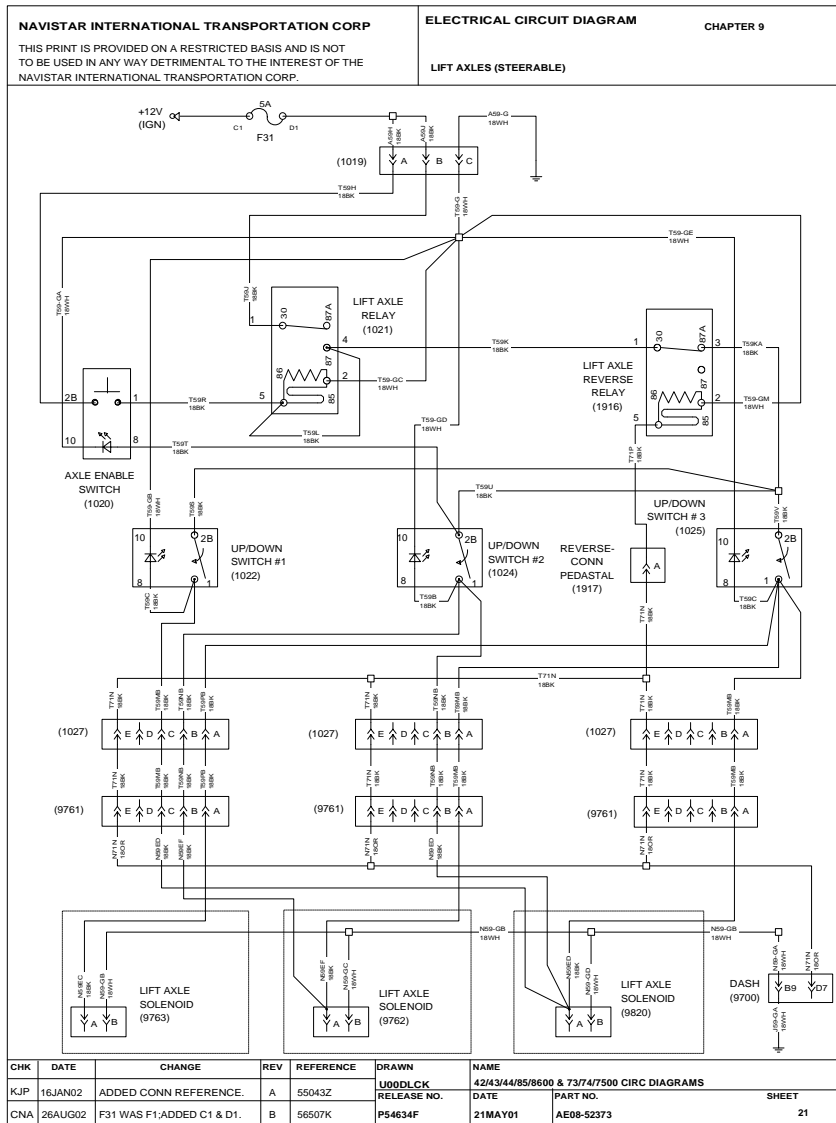


Figure 100 Lift Axles (Non-Steerable)

9.22. AIR ACTUATED PARK BRAKE, P. 22

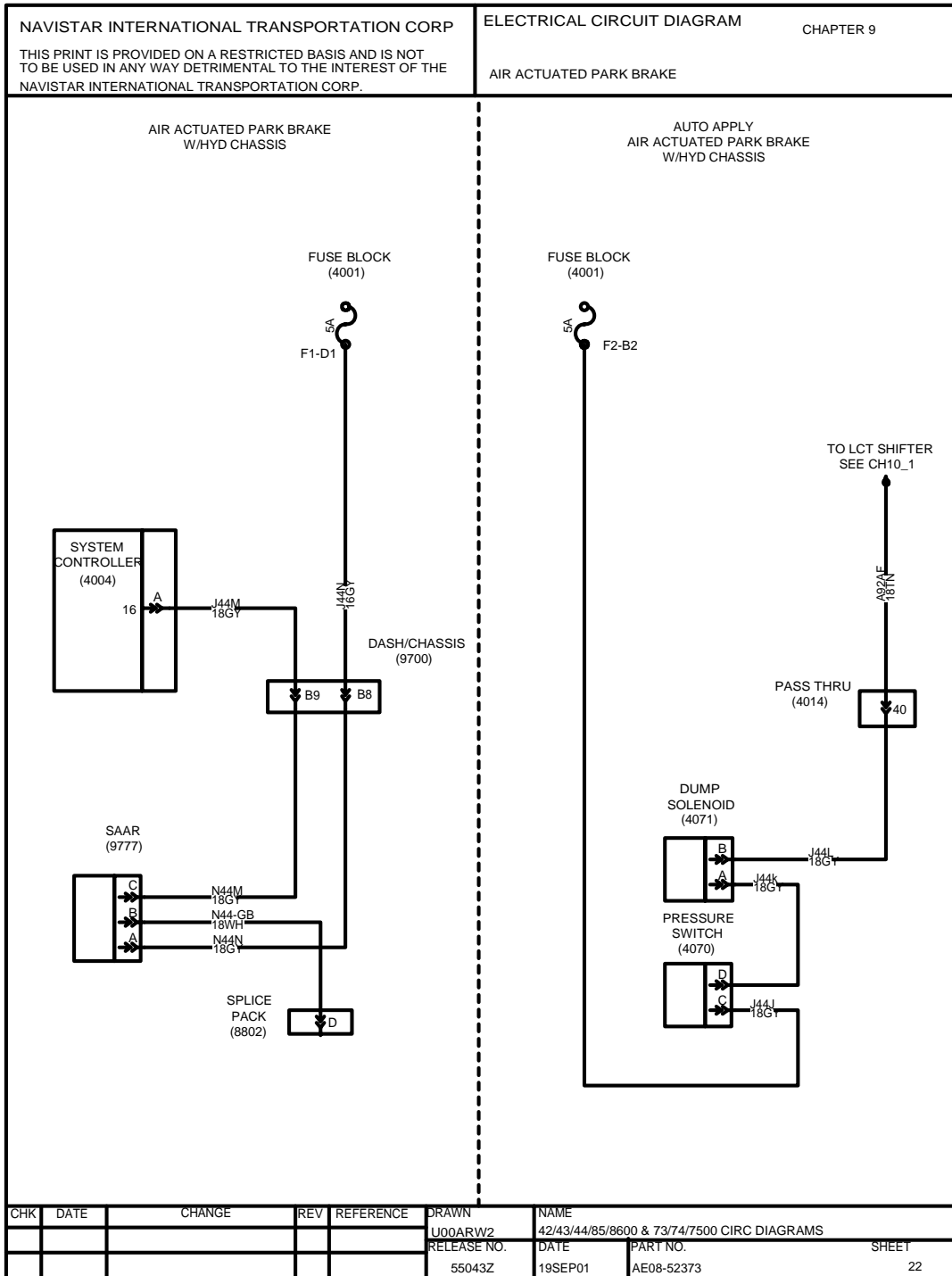


Figure 101 Air Actuated Park Brake

9.23. ANTILOCK BRAKE SYSTEM, WABCO AIR, P. 23

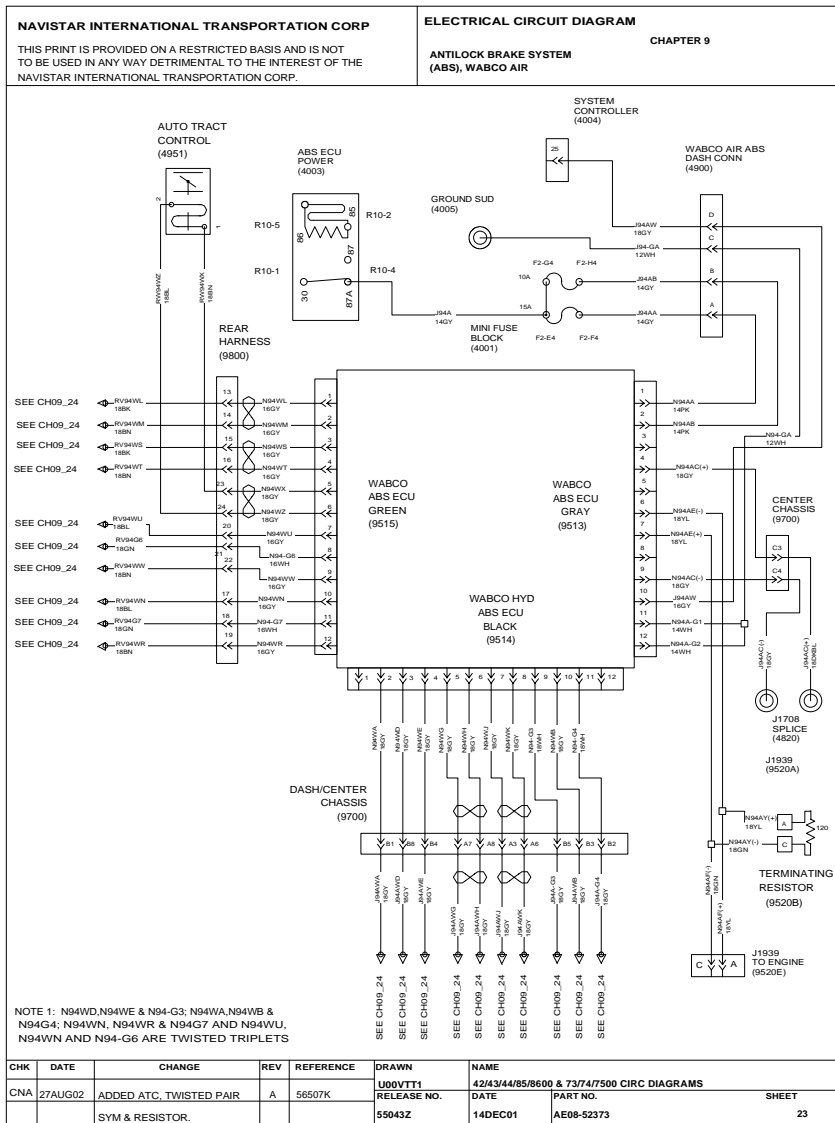


Figure 102 Antilock Brake System, WABCO Air

9.24. ANTILOCK BRAKE SYSTEM, WABCO AIR, P. 24

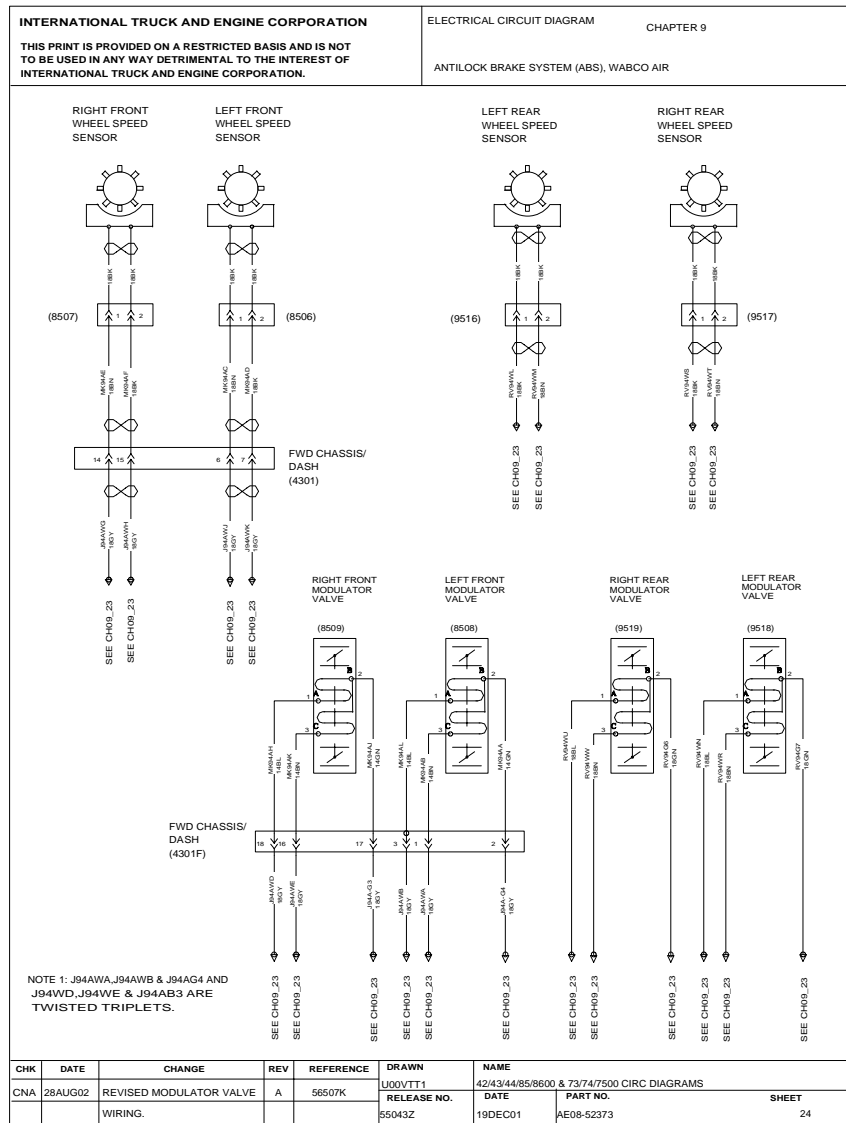


Figure 103 Antilock Brake System, WABCO Air

9.25. LIFT AXLES, WITH MULTIPLES FOR SS MODELS, P. 25

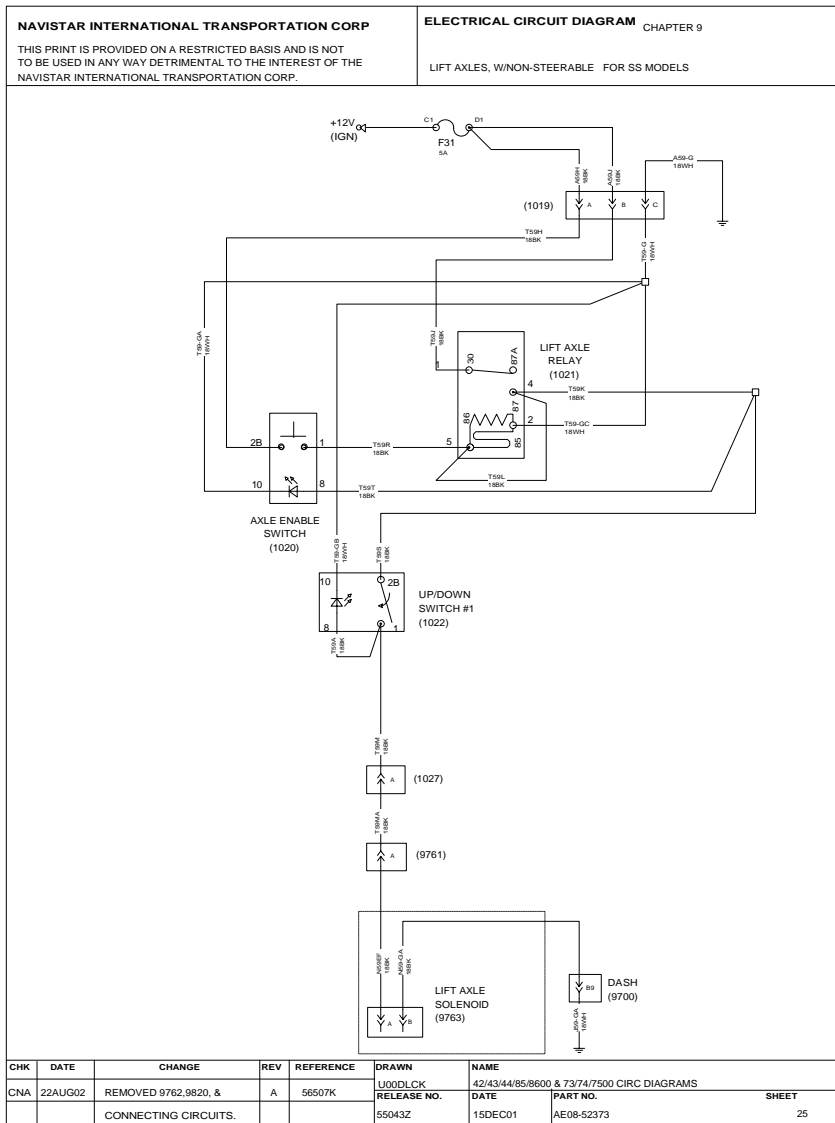


Figure 104 Lift Axles, With Multiples for SS Models

9.26. FUEL / WATER SEPARATOR WITH 12VDC FUEL PREHEATER, P. 26

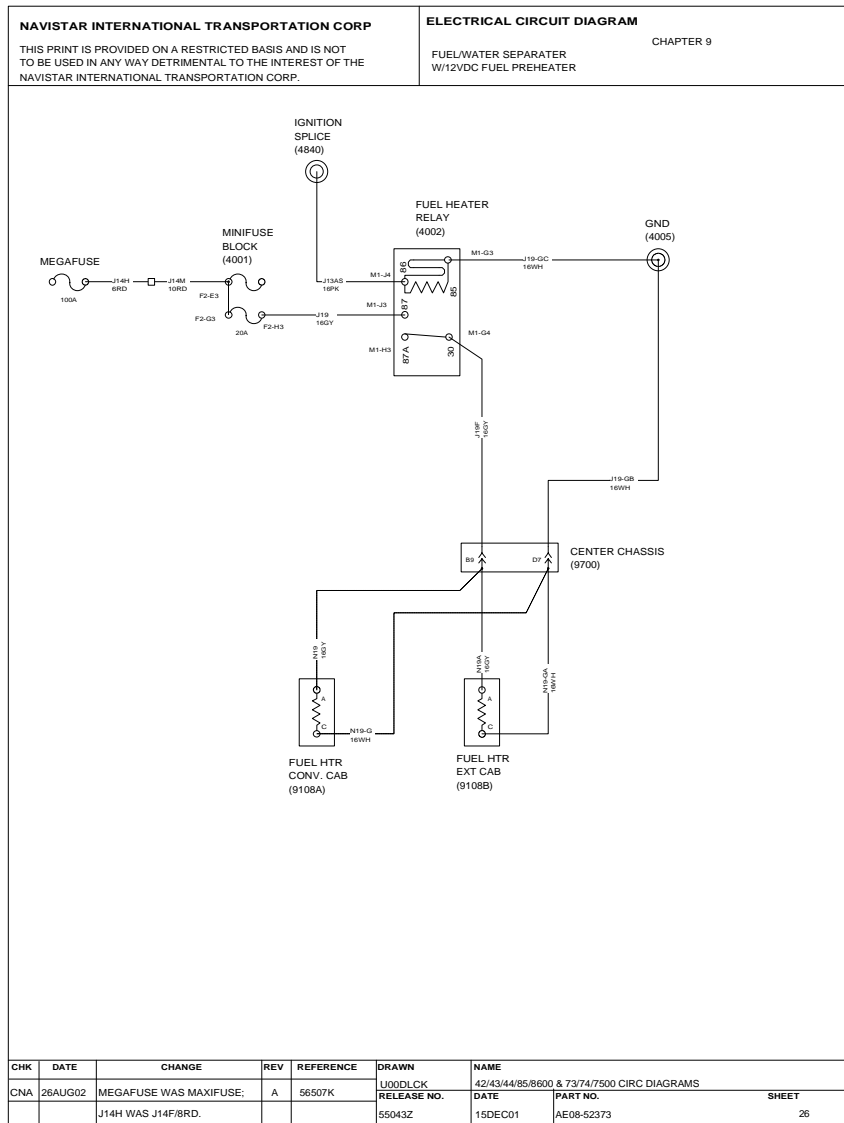


Figure 105 Fuel / Water Separator With 12VDC Fuel Preheater

10. TRANSMISSIONS (CHAPTER 10)

10.1. ALLISON LCT TRANSMISSION, P. 1

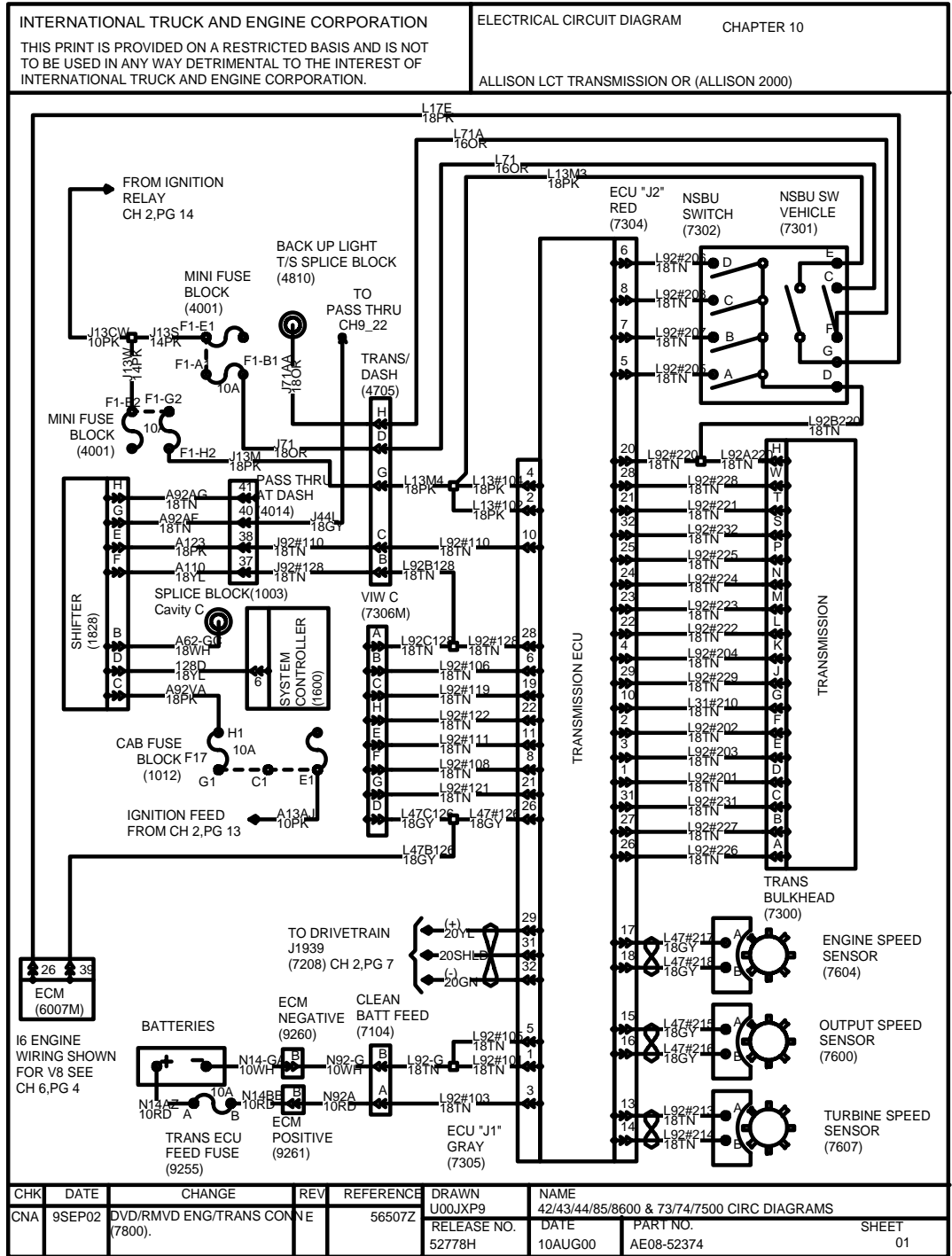


Figure 106 Allison LCT Transmission

10.2. ALLISON MD TRANSMISSION, P. 2

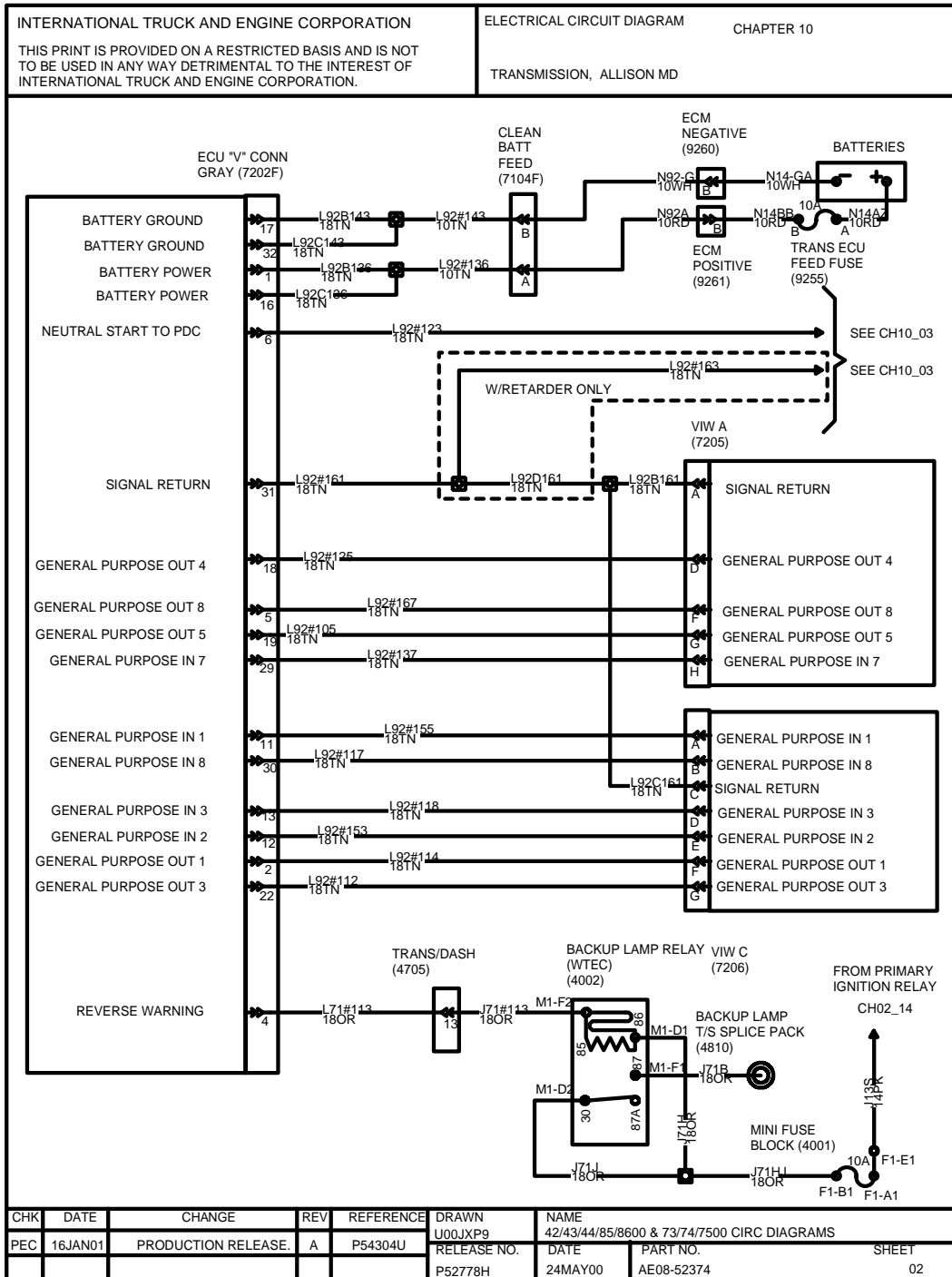


Figure 107 Allison MD Transmission

10.3. ALLISON MD TRANSMISSION (CONT.), P. 3

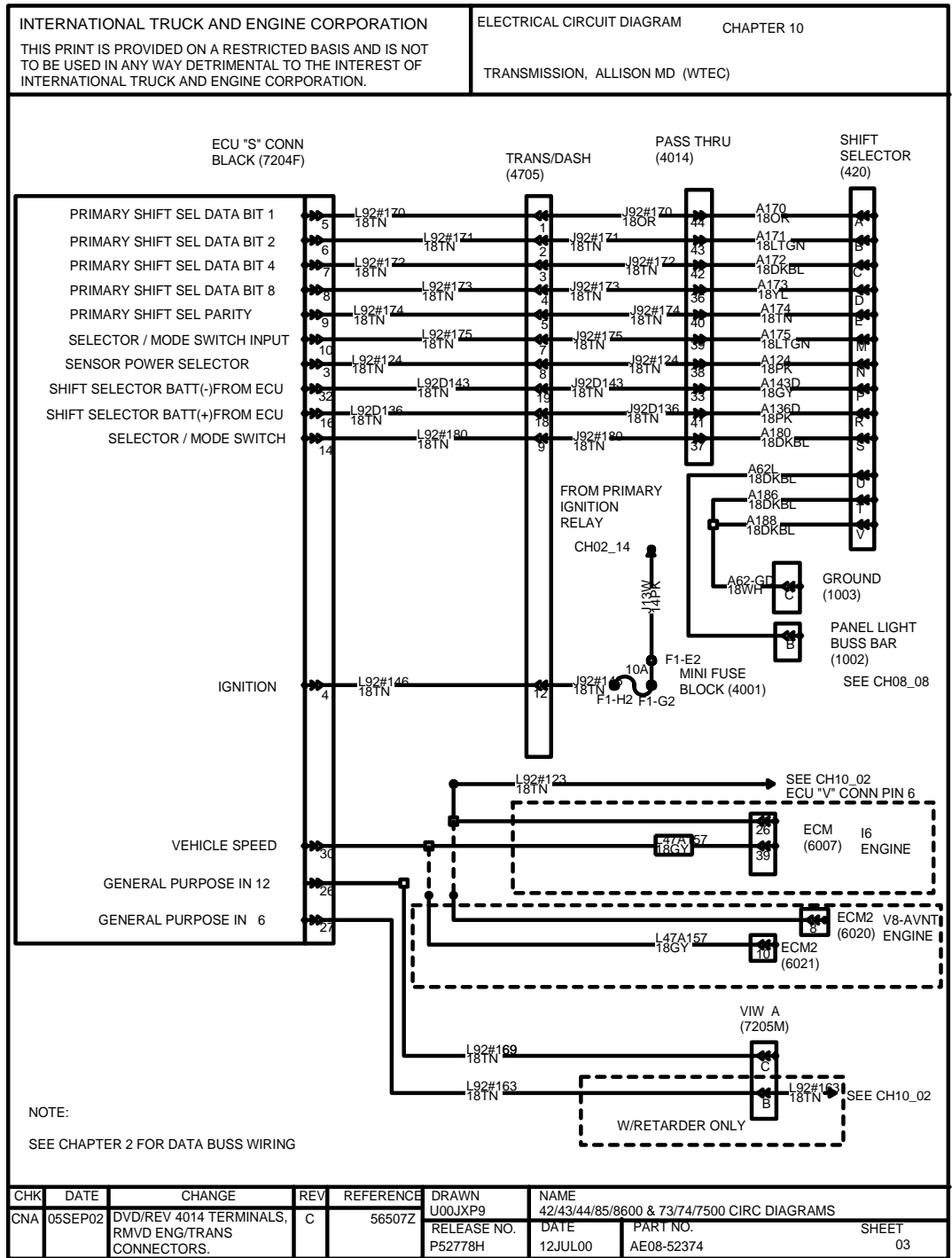


Figure 108 Allison MD Transmission (Cont.)

10.4. ALLISON MD TRANSMISSION (CONT.), P. 4

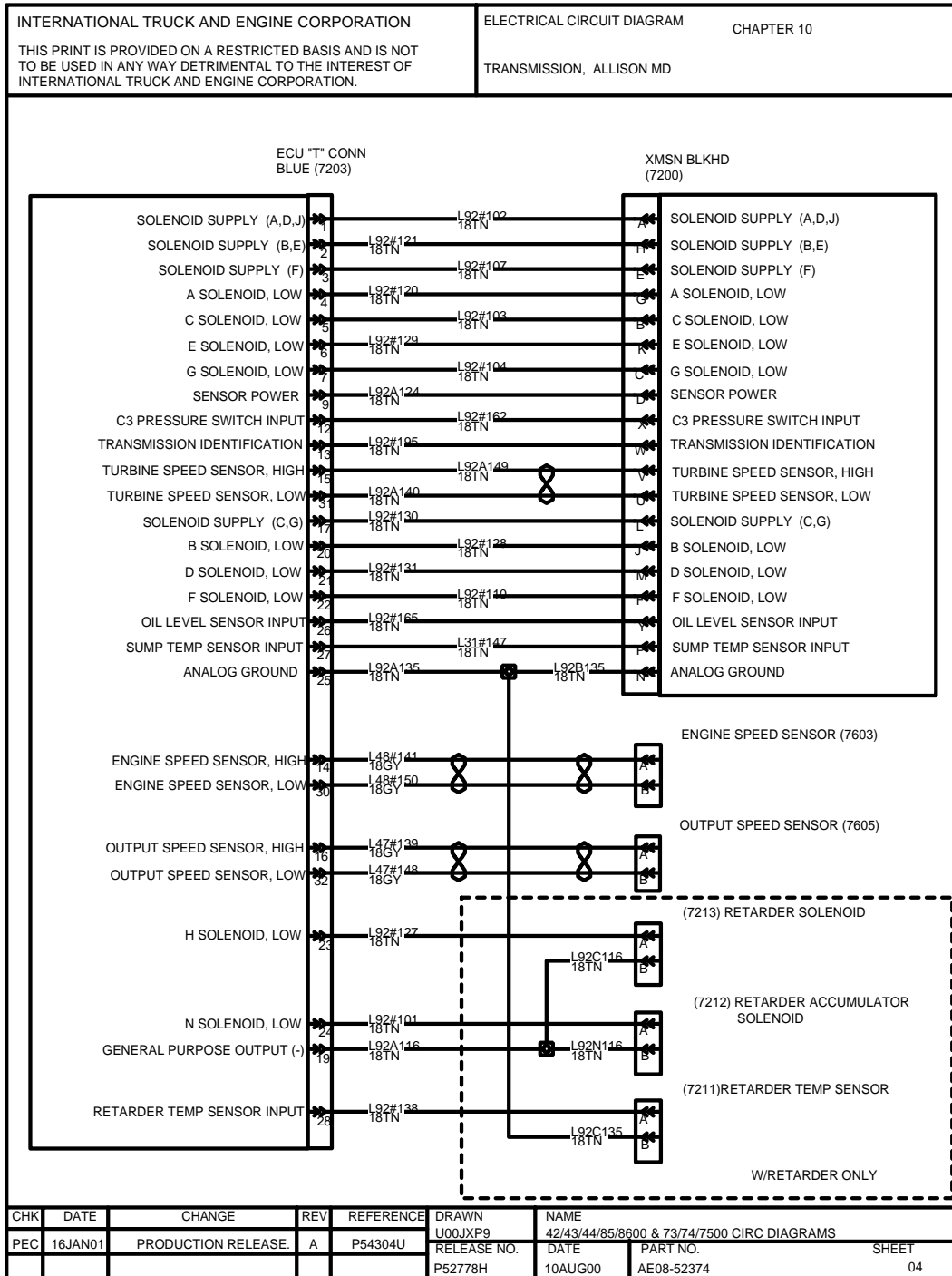


Figure 109 Allison MD Transmission (Cont.)

10.5. TRANSMISSION, WTEC MD W/AUTO NEUTRAL, P. 5

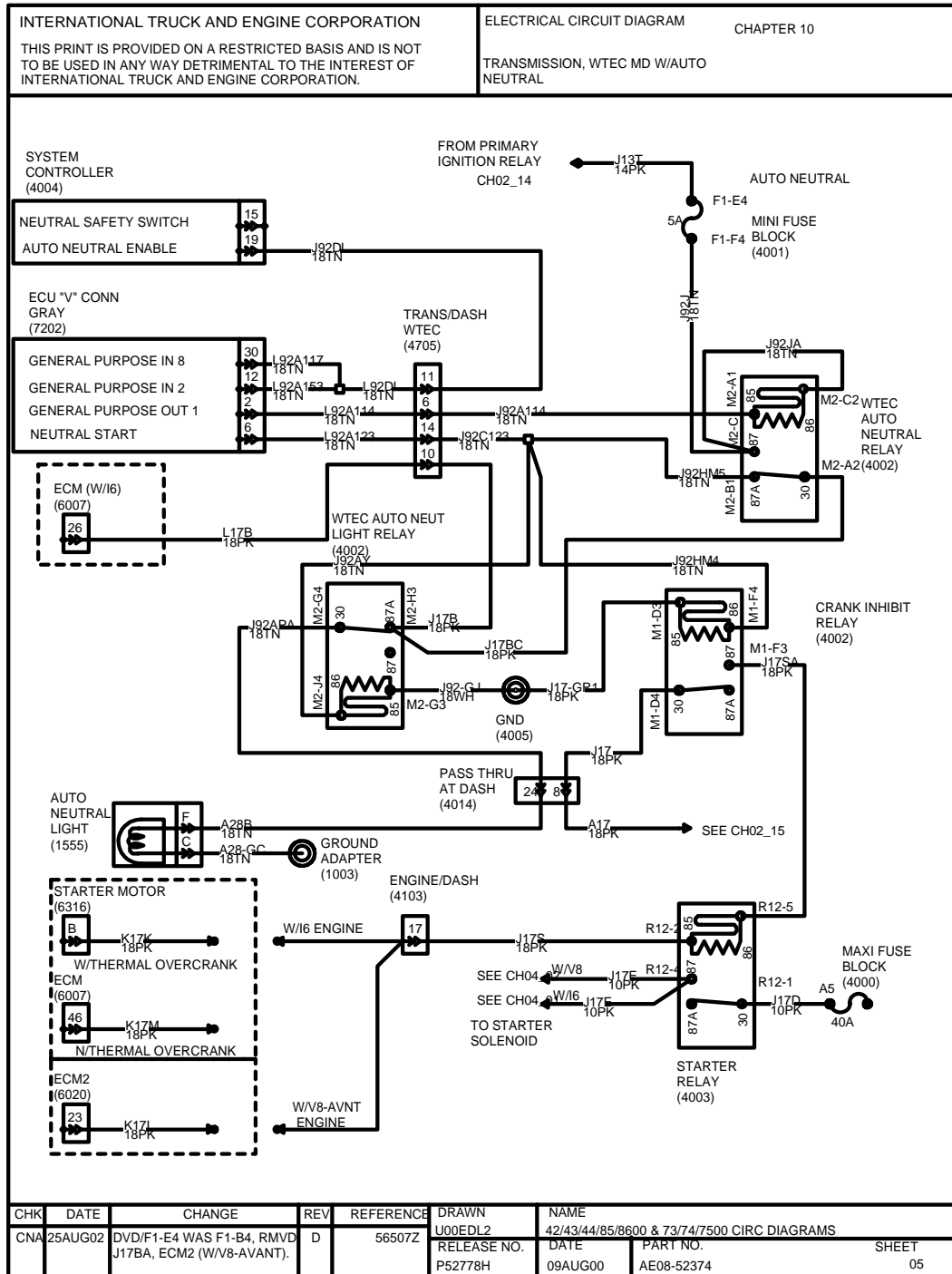


Figure 110 Transmission, WTEC MD W/Auto Neutral

10.6. EATON AUTOSHIFT TRANSMISSION, P. 6

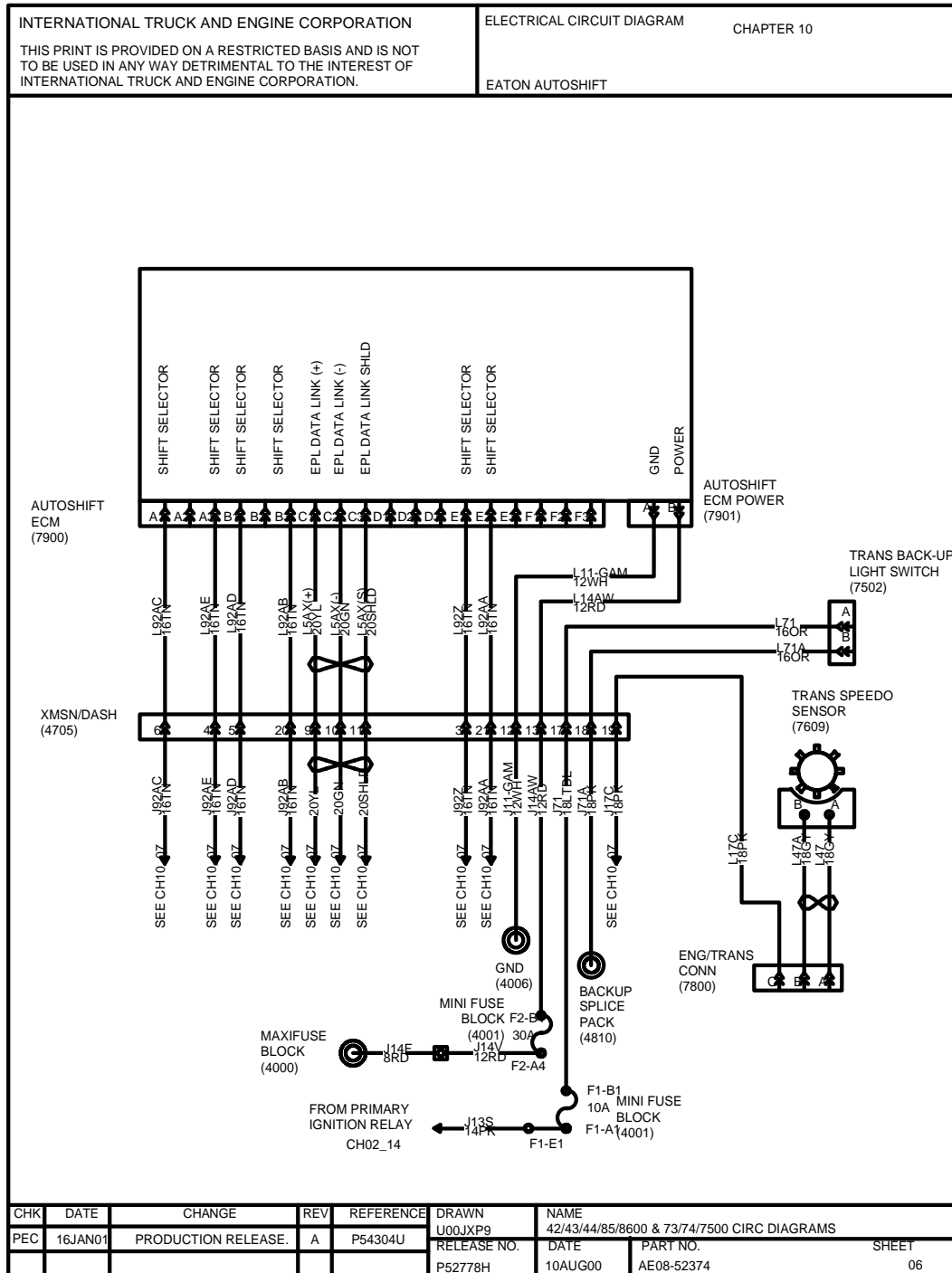


Figure 111 Eaton Autoshift Transmission

10.7. EATON AUTOSHIFT TRANSMISSION (CONT.), P. 7

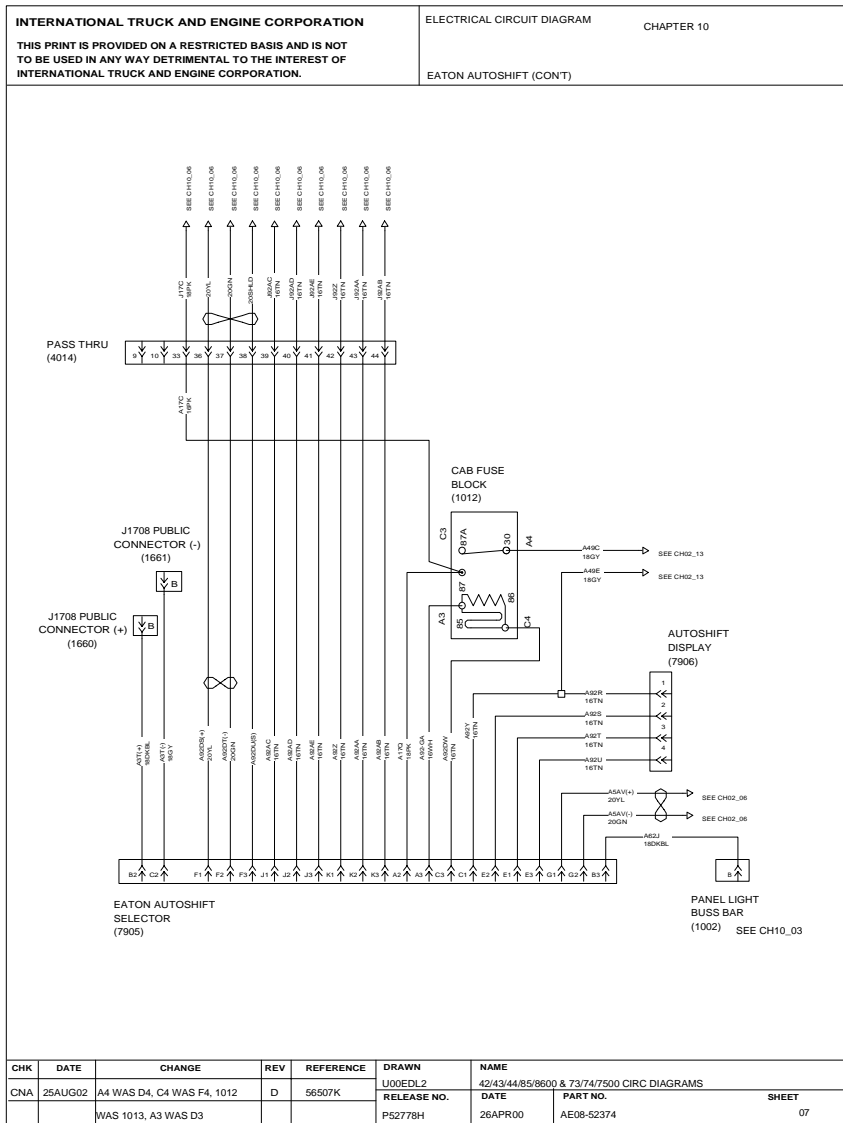


Figure 112 Eaton Autoshift Transmission (Cont.)

10.8. EATON LIGHTNING TRANSMISSION, P. 8

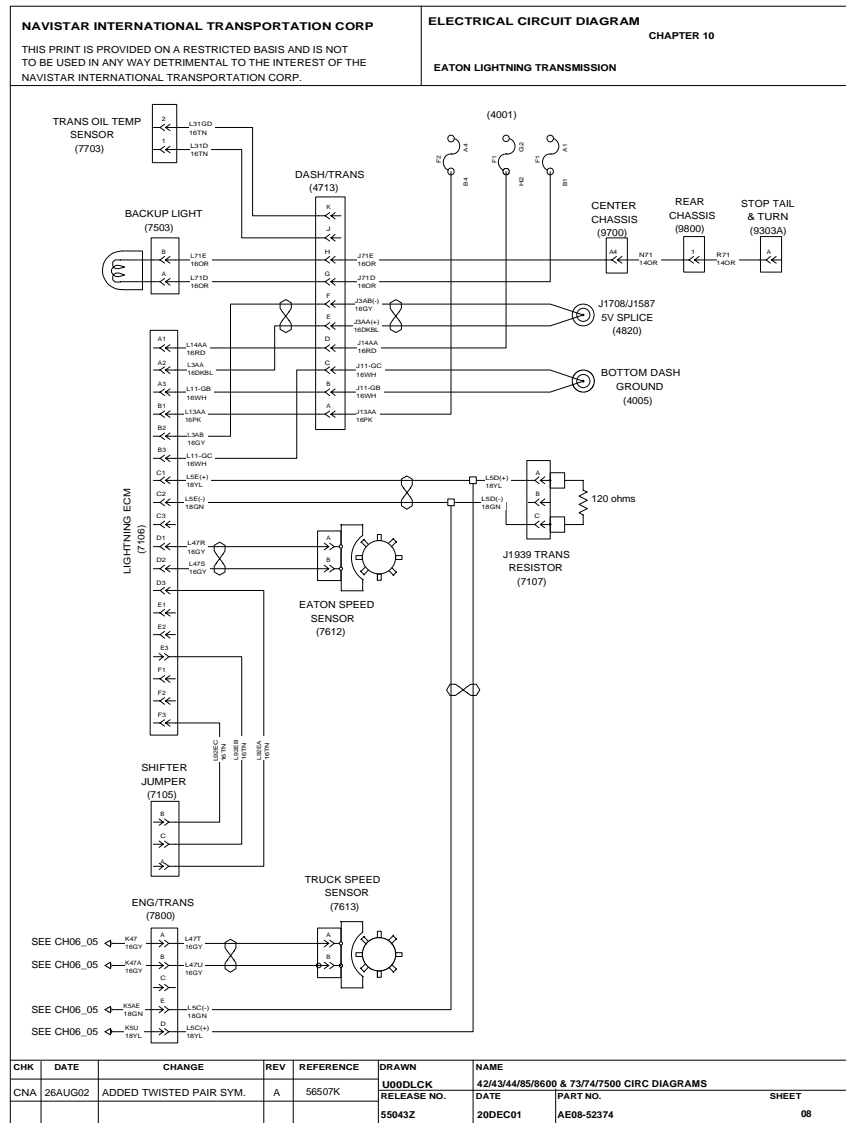


Figure 113 Eaton Autoshift Transmission (Cont.)

11. AIR CONDITIONING (CHAPTER 11)

11.1. HVAC SYSTEMS, P. 1

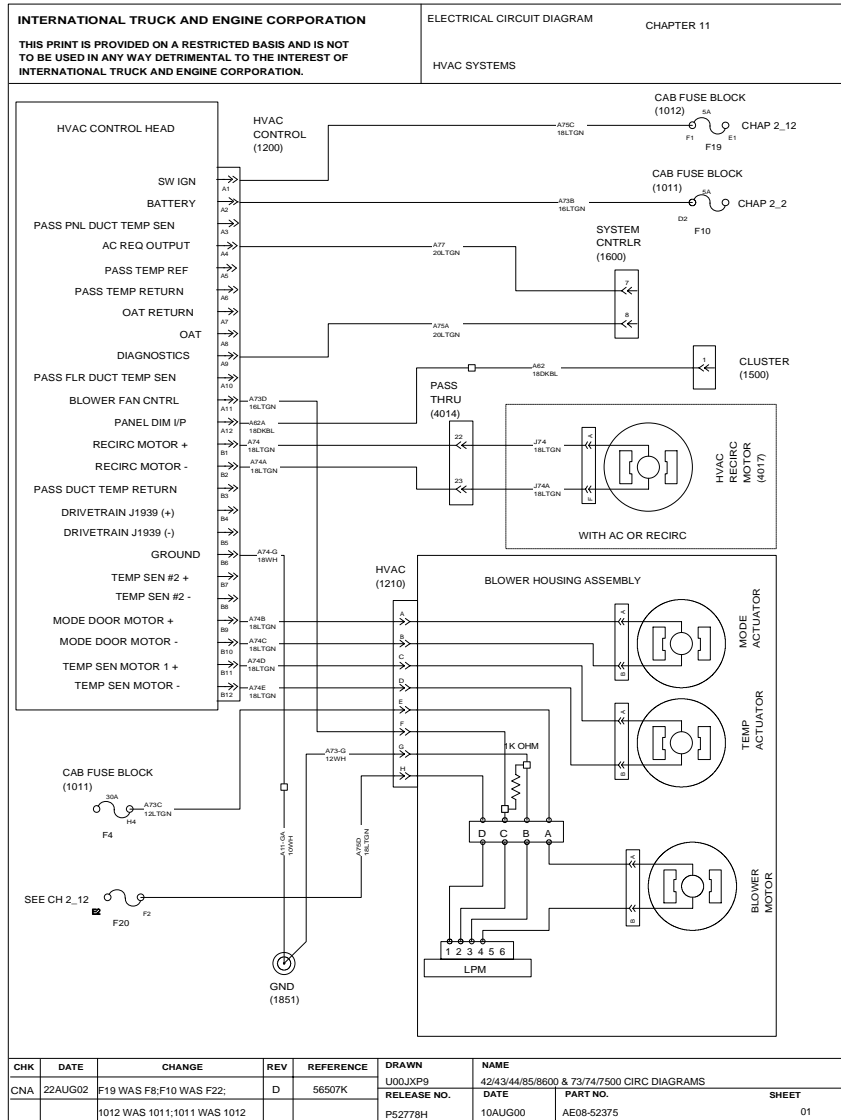


Figure 114 HVAC Systems

11.2. AIR CONDITIONING (ONLY), P. 2

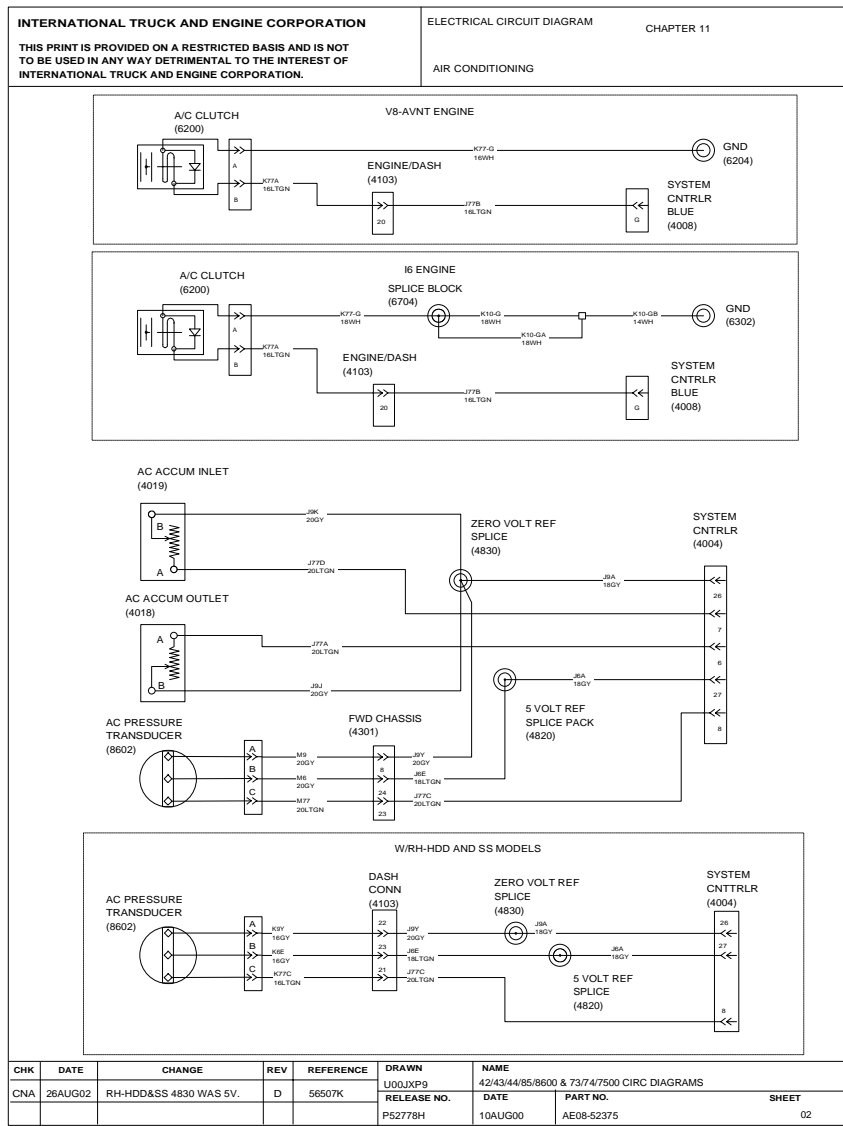


Figure 115 Air Conditioning (Only)