GAUGES WITH AND WITHOUT INTEGRAL WARNING LIGHT (CHAPTER 7) IP/GAUGE LIST, P. 1

INTI	ERNATIO	NAL TRUCK AND	ENGINE (COR	PORATION	E	LECTR	ICAL CIRCUIT	DIAGRAM	CHAPTER 7		
THIS	PRINT IS	PROVIDED ON A RES	STRICTED	BAS	IS AND IS NOT					0.0		
	O BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF NTERNATIONAL TRUCK AND ENGINE CORPORATION.						IP/GAUGES					
IINIL	KINATION	AL TROOK AND ENGI	VE CORFC	INAI	ION.							
ı												
		INSTRUMENT PANEL GAUGES										
		GAUGE WARN				810	OLONAL BATH			CENCOD		
	GA	UGE	WARN			SIG	SIGNAL PATH			SENSOR LOCATION		
			LIGHT									
	RPM (TAC		NO ENGINE CTRLR/DI							ENGINE		
	MPH/KPH	(SPD)	NO				/E TRAIN J1939/CLUSTER			TRANSMISSION		
	FUEL		YES							FUEL TANK		
	VOLT	=0\	YES		SYSTEM CT							
	AIR 1 (PR		YES					J1939/CLUSTE		INSIDE CAB - DASH P STEERING COL AREA		
	AIR 2 (PR		YES			SYSTEM CTRLR/DRIVE TRAIN J1939/CLUSTER					4	
ı		ATER (TEMP) YES ENGINE CTRLR/DRIVE								ENGINE		
ı	ENG OIL (YES					J1939/CLUSTE		ENGINE		
- 1	OIL (PRE	·	YES					J1939/CLUSTE		ENGINE		
- 1	TRANS (T		YES					/DRIVE TRAIN	TRANSMISSION			
- 1		R APPLICATION NO SYSTEM CTRLR/DRIVE TRAIN J1939/CLI AR AXLE TEMP YES SYSTEM CTRLR/DRIVE TRAIN J1939/CLI								FWD CHASSIS		
- 1	REAR AXL	E LEMP	YES		SYSTEMICIT	RLR/DRIVE	RAIN	J1939/CLUS11	:K	AXLE		
- 1												
- 1												
- 1												
- 1												
- 1												
- 1												
- 1												
- 1												
ı												
- 1												
ı												
	NOTES	:										
	1) WAR	NING LIGHTS ARE PA	ART OF TH	IE G	AUGES AND LO	CATED IN	THE GA	UGE				
CHK	DATE	ATE CHANGE REV REFEREN				DRAWN	N NAME					
PEC	16JAN01					U00JXP9		42/43/44/85/8		CIRC DIAGRAMS	CUEET	
	. 557 11 10 1				. 0.0040	RELEASE P52778H		DATE 09AUG00	PART NO. AE08-52371		SHEET 01	
_						1 02//011		30/10300	ALOG 0207 1			

Figure 67 IP/Gauge List

WARNING LIGHT LIST, P. 2

		VAL TRUCK AND ENGINE CO			1	ELECTR	CAL CIRCUIT DI	AGRAM	CHAPTER 7	
BE	USED IN	PROVIDENON A RESTRICTED E I ANY WAY DETRIMENTAL TO TH LL TRUSK AND ENGINE CORPO	IE INT	EREST OF		WARNIN	IG LIGHTS LIST			
				P WARNING LIGHT	rs					
	WARNING LIGHT TITLE				SIGNAL	SENSOR				
						LOCATION				
	RANG	GE INHIBITED	+	TRANS CTRLR/DR						
	FUEL	FILTER	\top	SYSTEM CTRLR/D	FUEL FILTER					
	ENGINE (YELLOW LED)			ENGINE CTRLR/DI		_				
	ENGINE (RED LED)			ENGINE CTRLR/DI						
	BRAKE PRESSURE (())			SYSTEM CTRLR/D	SWITCH					
	BRAKE FLUID			SYSTEM CTRLR/D	BRK RESEVOIR					
	TRAC CTRL			TRUCK ABS CTRL						
	CHECK TRANS			TRANS CTRLR/DR						
	TRAILER ABS			TRLR ABS CTRLR						
	WASHER FLUID			SYSTEM CTRLR/D	WASHER BOTTLE					
	(LEFT TURN)			SYSTEM CTRLR/D			LUSTER		TURN SIG SW	
	AIR BAG			DISCRETE NOT O						
	WATER IN FUEL			SYSTEM CTRLR/D					FUEL FILTER	
	COOLANT LEVEL			ENGINE CTRLR/DF	SURGE TANK					
	CHECK ELECT SYS			SYSTEM CTRLR/D						
	PARK (P)			SYSTEM CTRLR/D SYSTEM CTRLR/D	SWITCH					
	ABS			TRUCK CTRLR/DR		_				
	(RIGHT TURN)			SYSTEM CTRLR/D		_				
	WAIT TO START			ENGINE CTRLR/DF		_				
	FASTEN BELTS			SYSTEM CTRLR/D						
	(HIGH	ASTEN BELTS HIGH BEAM IND)		SYSTEM CTRLR/D						
	COLD AMB PROTEC			SYSTEM CTRLR/D						
	RETARD OVERHEAT			TRANS CTRLR/DR	TRANSMISSION					
	CHECK AC			SYSTEM CTRLR/D						
AUTO NEU		NEUTRAL		DISCRETE NOT O	SWITCH					
		RNATOR		DISCRETE NOT O	N DATA BU	s				
	PTO/THROTTLE			SYSTEM CTRLR/D						
	OPTIMIZED IDLE			DISCRETE NOT O						
	SNOW VALVE			DISCRETE NOT O	SNOW VALVE					
	FR AX	LE DIFF LOCK		DISCRETE NOT OF	FWD RR AXLE					
	RR AXLE DIFF LOCK			DISCRETE NOT O	RR RR AXLE					
	MESSAGE WAIT			DISCRETE NOT O						
	PTO CONVERTER TEMP			DISCRETE NOT O						
				DISCRETE NOT O						
		CHLOC RELEASE	+	DISCRETE NOT O						
PARK FLUID			\perp	SYSTEM CTRLR/D						
	FR AXLE ENGAGED			DISCRETE NOT O	N DATA BU	TRANSFER CASE				
Т	DATE	CHANGE	REV	REFERENCE	DRAWN		NAME			
2	9SEP03	ADDED FR AXLE ENGAGED.	В	58928U	U00JXP9 RELEASE N	0.	42/43/44/85/8600 DATE	& 73/74/7500 CIR PART NO.	C DIAGRAMS SHE	ET
		1		1	P52778H		09AUG00	AE08-52371	5/12	

Figure 68 Warning Light List

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

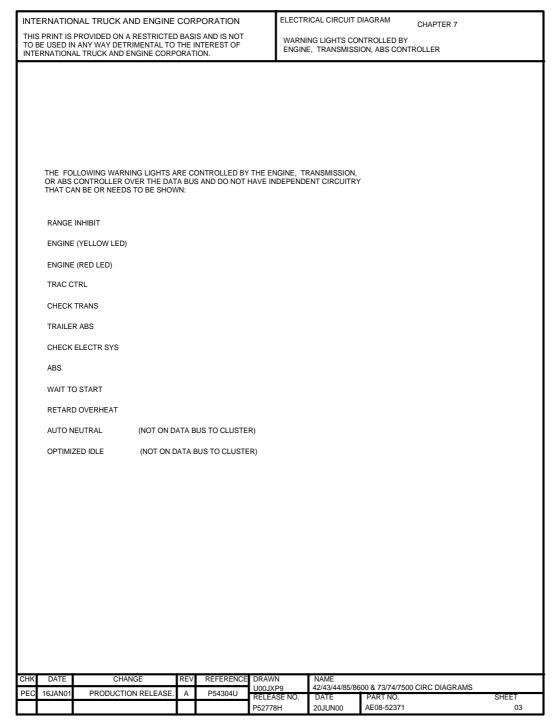


Figure 69 Warning Lights Controlled by Engine, Transmission, ABS Controller

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

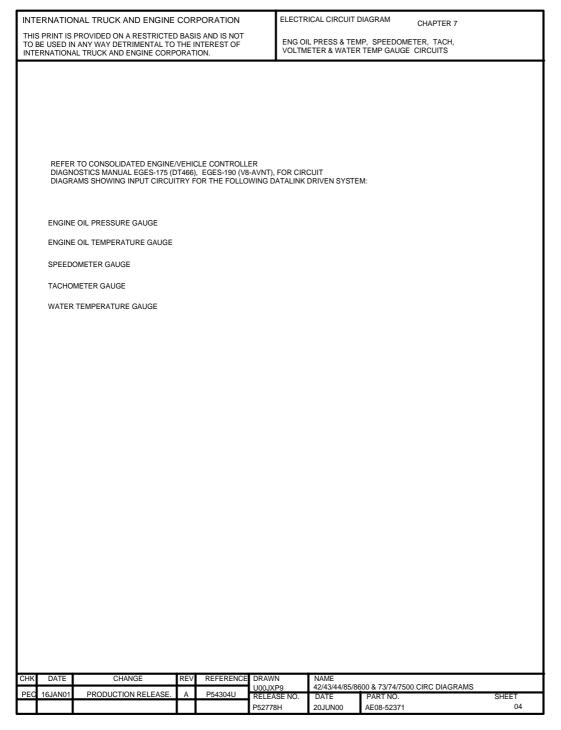


Figure 70 Engine Oil Pressure and Temp, Speedometer, Tach, Voltmeter and Water Temp Gauge Circuits

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

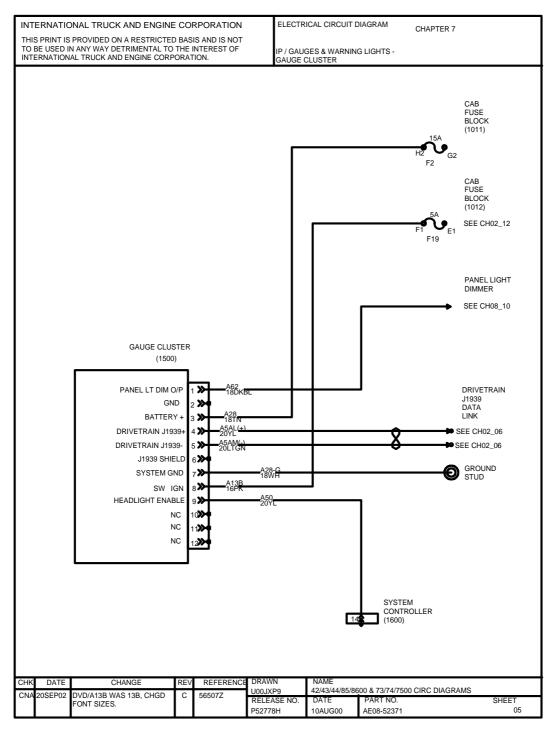


Figure 71 IP/Gauges and Warning Lights — Gauge Cluster

AIR PRESSURE INPUT CIRCUIT, P. 6

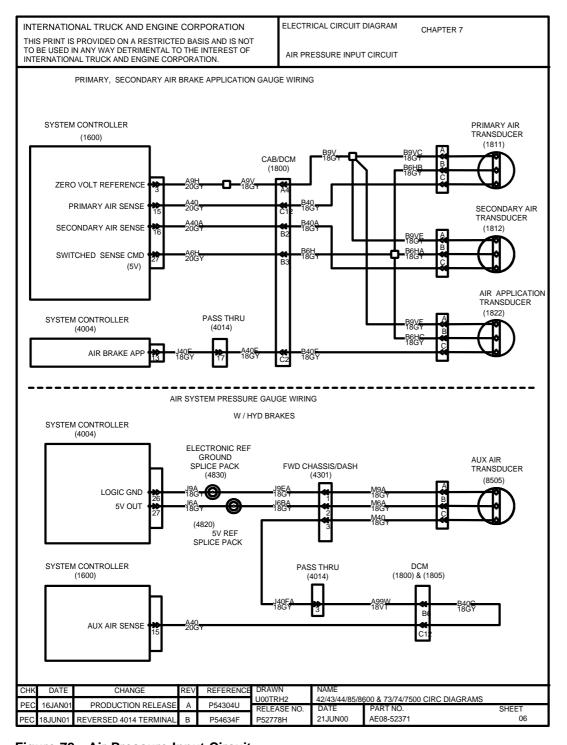


Figure 72 Air Pressure Input Circuit

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

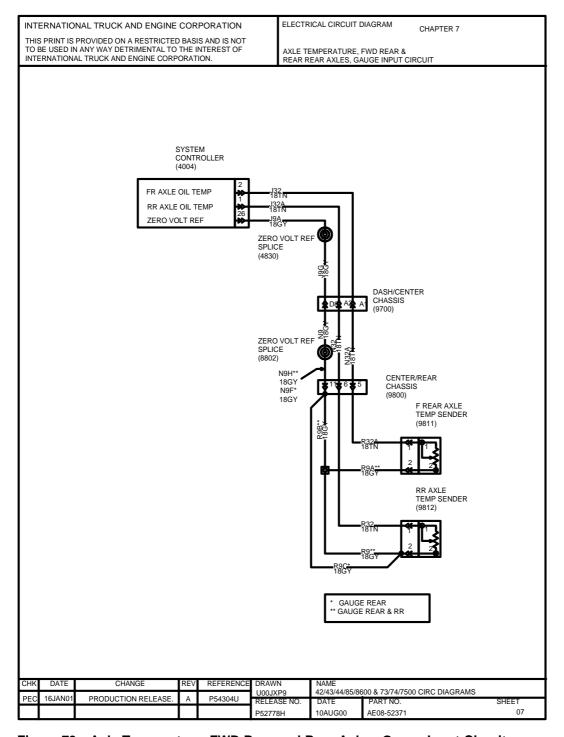


Figure 73 Axle Temperature, FWD Rear and Rear Axles, Gauge Input Circuit

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

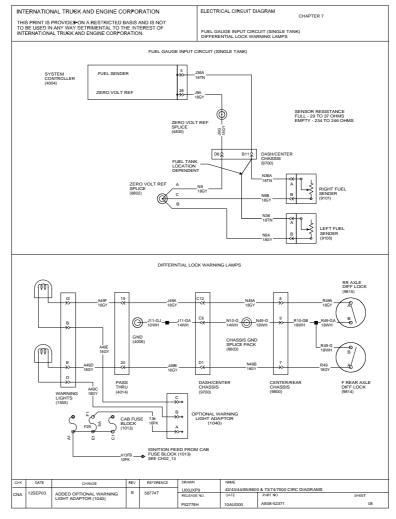


Figure 74 Fuel Gauge Input Circuit (Single Tank) Differential Lock Warning Lamps

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

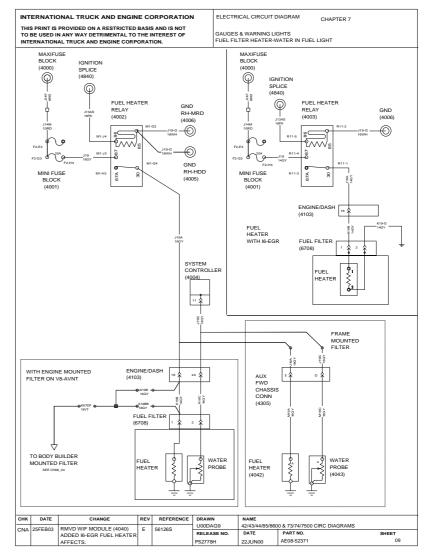


Figure 75 Gauges and Warning Lights — Fuel Filter Restriction and Water in Fuel Lights

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

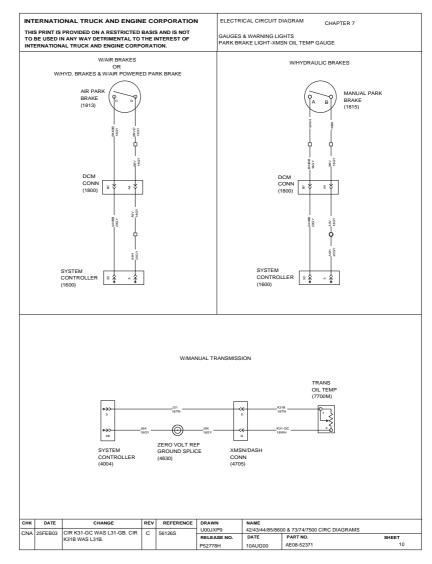


Figure 76 Gauges and Warning Lights — Park Brake Light and Transmission Oil Temp. Gauge

GAUGES AND WARNING LIGHTS — AMMETER, P. 11

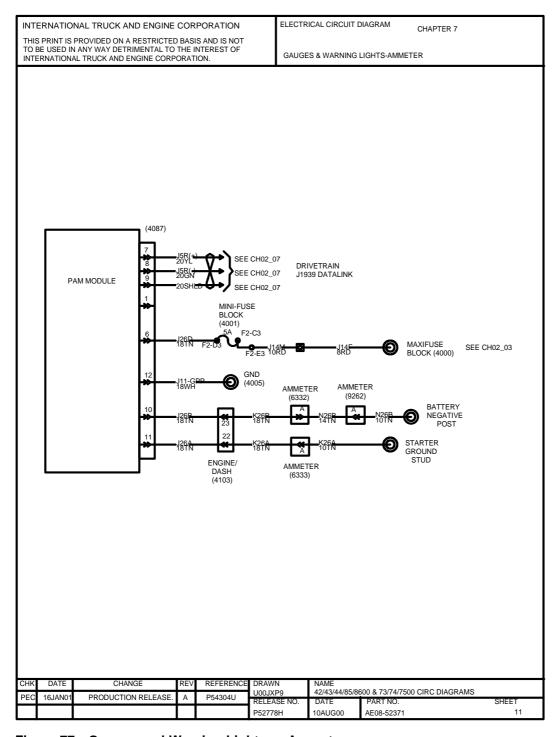


Figure 77 Gauges and Warning Lights — Ammeter

ENGINE OIL TEMPERATURE GAUGE WITH CATERPILLAR, P. 12

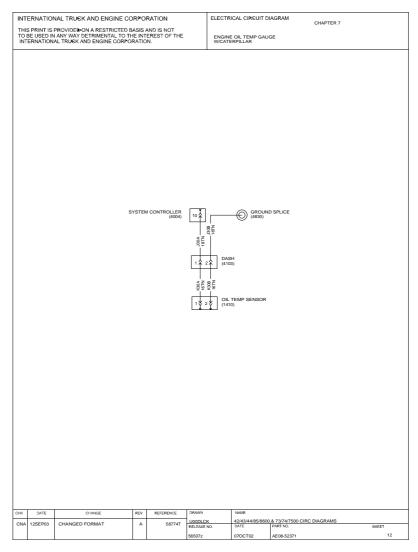


Figure 78 Engine Oil Temperature Gauge With Caterpillar

FRONT AXLE ENGAGEMENT LAMP, P. 13

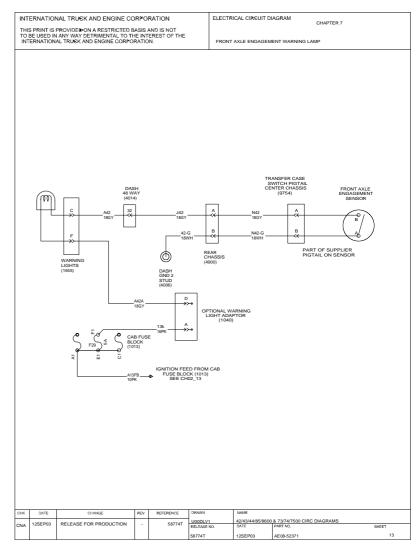


Figure 79 Front Axle Engagement Lamp

LIGHTS (CHAPTER 8)

BACK UP LIGHTS, P. 1

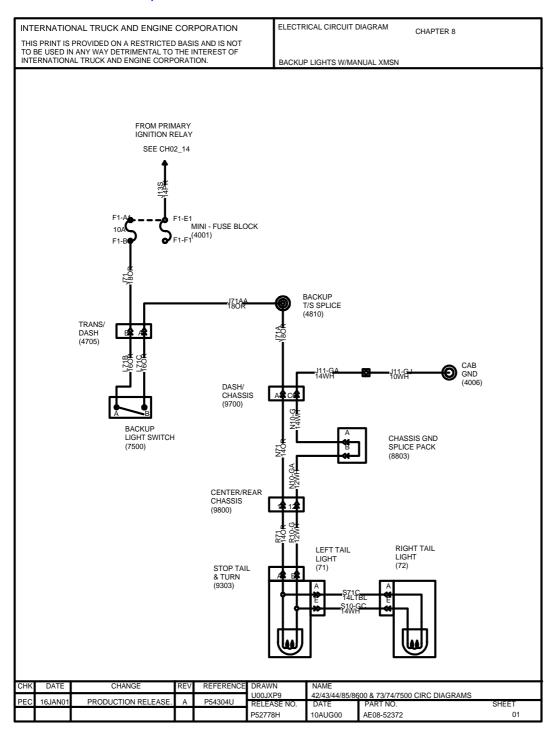


Figure 80 Back Up Lights

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

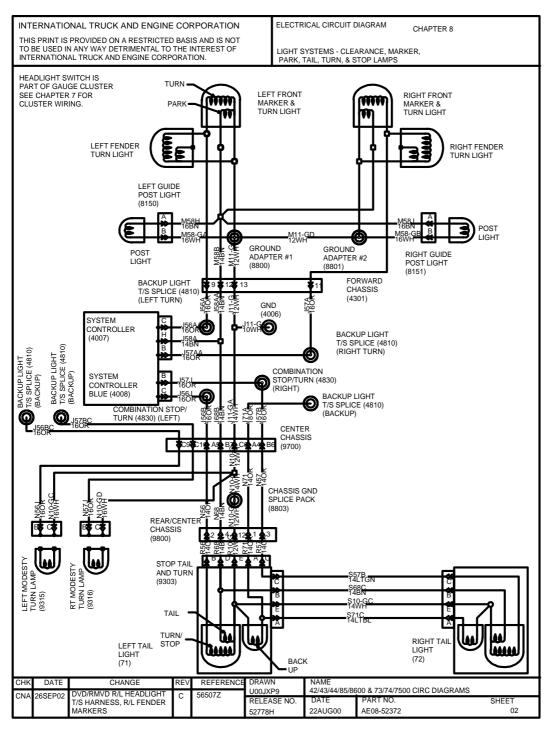


Figure 81 Light Systems — Clearance, Marker, Park, Tail, Turn and Stop Lamps

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

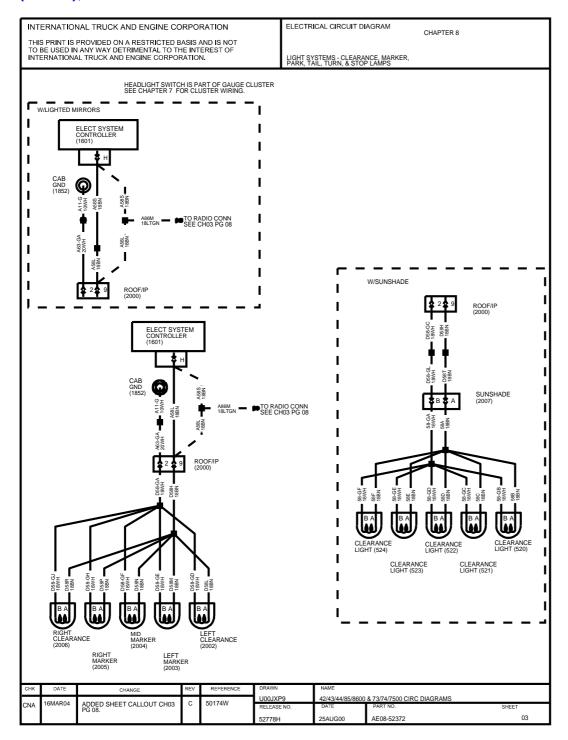


Figure 82 Light Systems — Clearance, Marker, Park, Tail, Turn and Stop Lamps (Cont.)

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

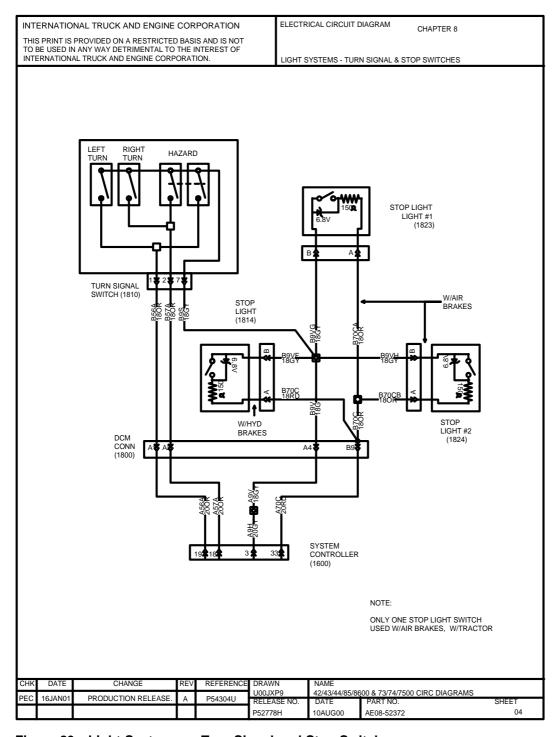


Figure 83 Light Systems — Turn Signal and Stop Switches

DOME LIGHT, MAP LIGHT, P. 5

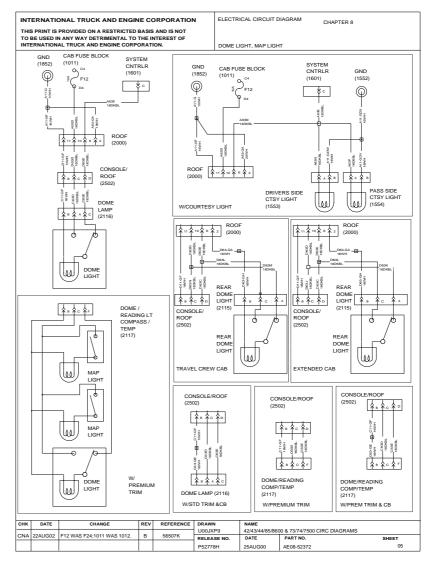


Figure 84 Dome Light, Map Light

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

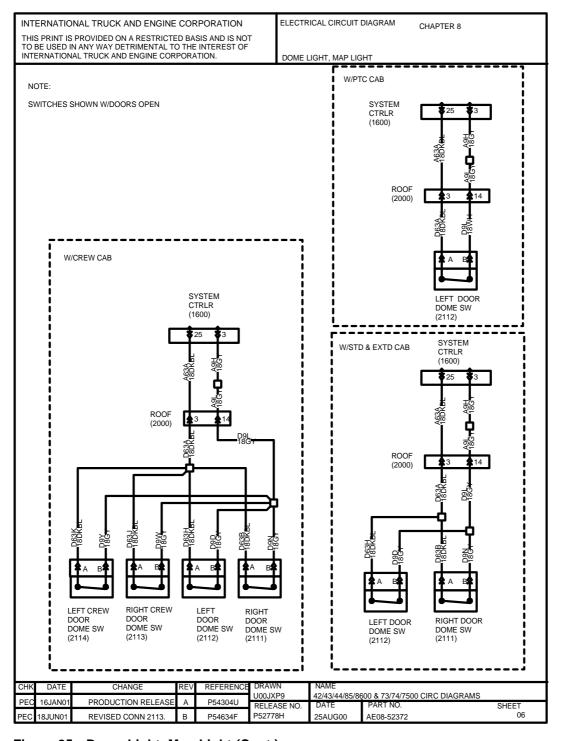


Figure 85 Dome Light, Map Light (Cont.)

FOG LIGHT AND WORK LIGHT, P. 7

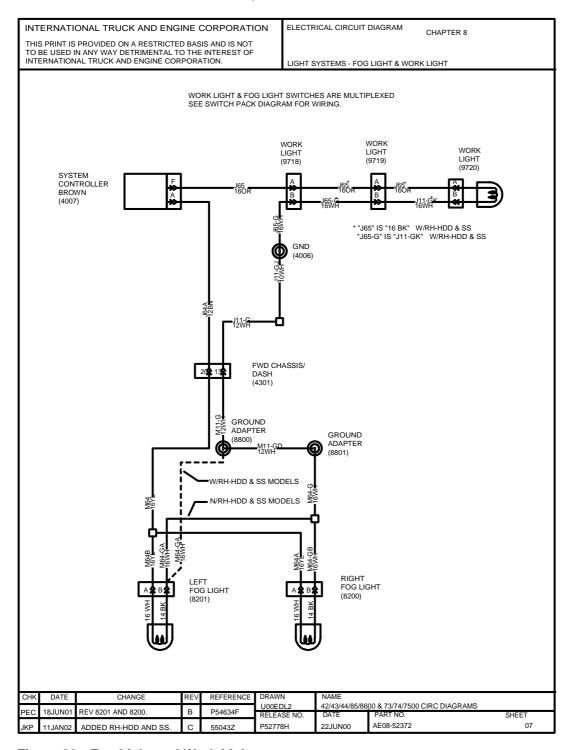


Figure 86 Fog Light and Work Light

HEADLIGHTS, P. 8

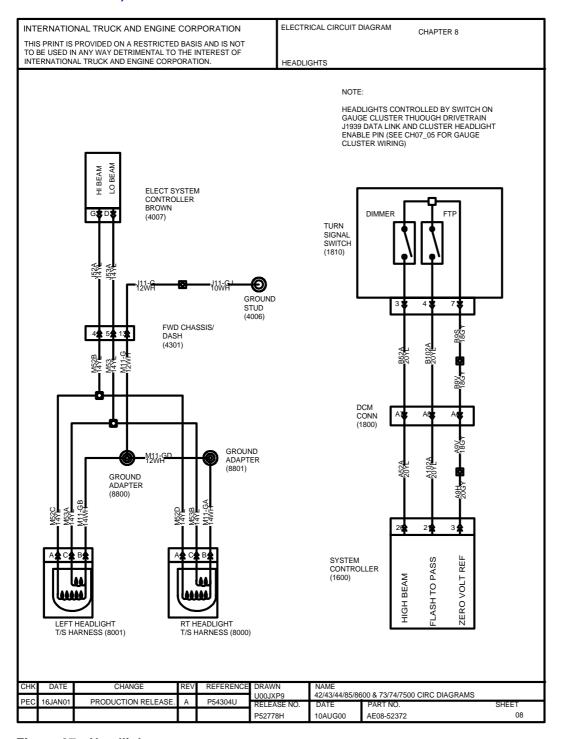


Figure 87 Headlights

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

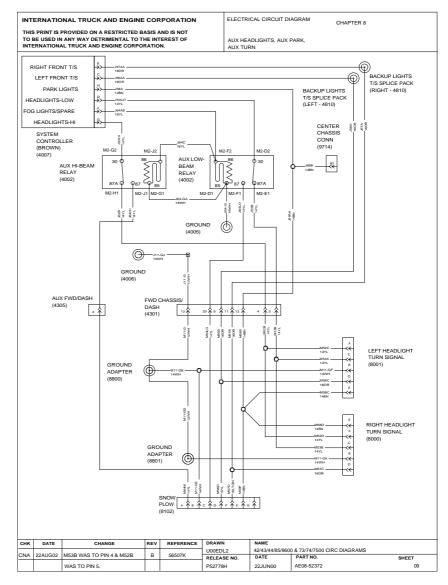


Figure 88 Aux. Headlights, Aux. Park, Aux Turn

PANEL LIGHTS, P. 10

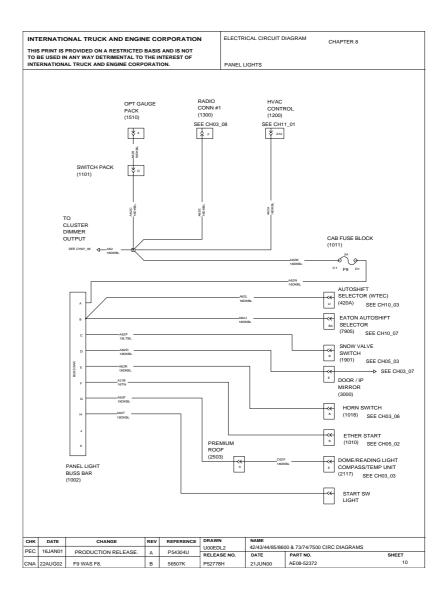


Figure 89 Panel Lights

CHASSIS ACCESSORIES (CHAPTER 9)

AIR DRYER AND HEATED DRAIN VALVE, P. 1

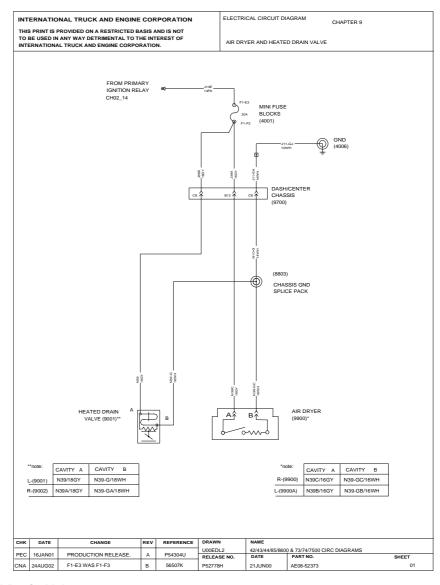


Figure 90 Air Dryer and Heated Drain Valve

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

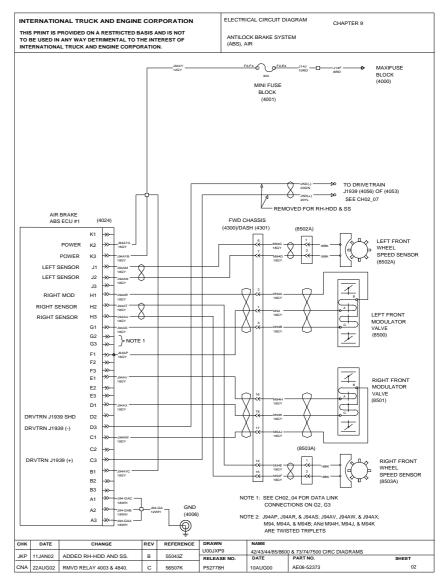


Figure 91 Antilock Brake System (ABS), Air

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

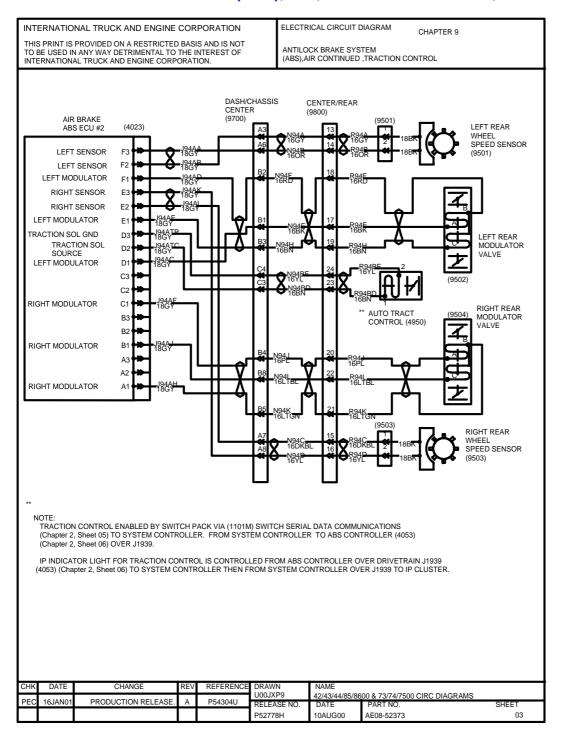


Figure 92 Antilock Brake System (ABS), Air, Traction Control

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

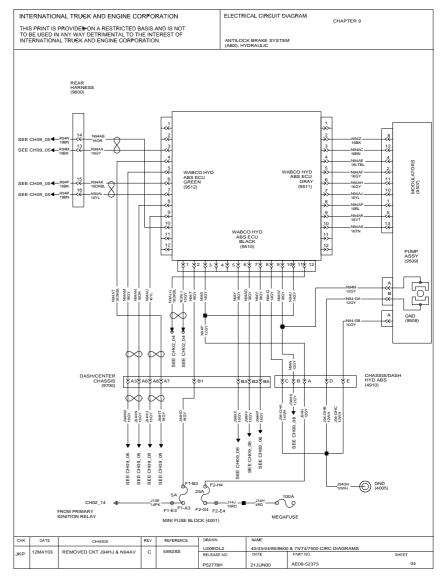


Figure 93 Antilock Brake System (ABS), Hydraulic

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

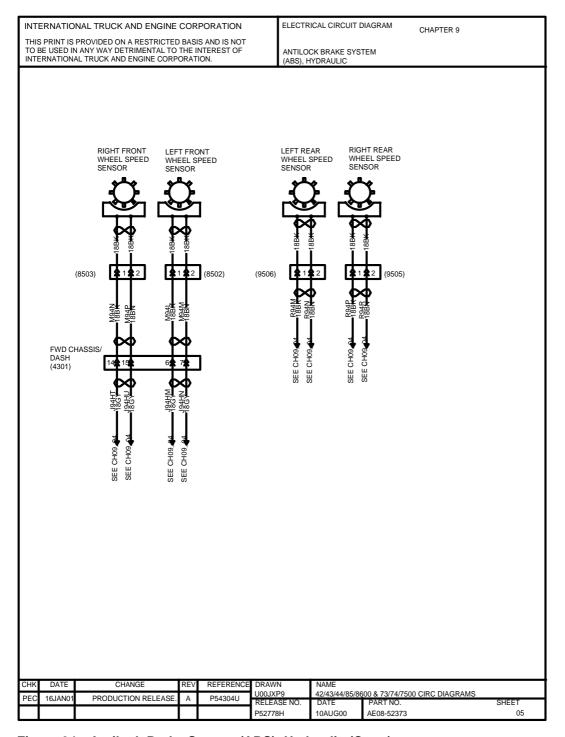


Figure 94 Antilock Brake System (ABS), Hydraulic (Cont.)

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

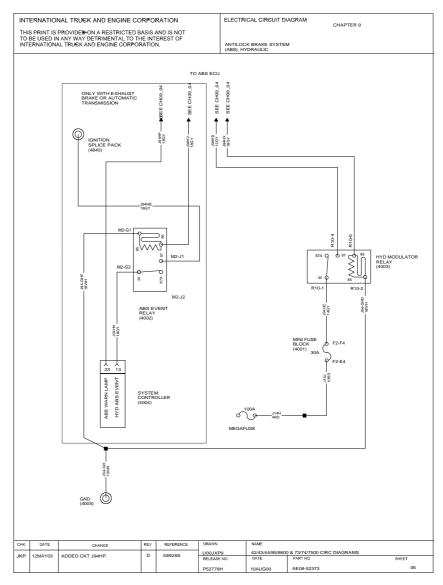


Figure 95 Antilock Brake System (ABS), Hydraulic (Cont.)

TWO SPEED AXLE SWITCH WITH MANUAL TRANSMISSION AND I6 HEUI FUEL HEATER N/WARN LIGHTS, P. 7

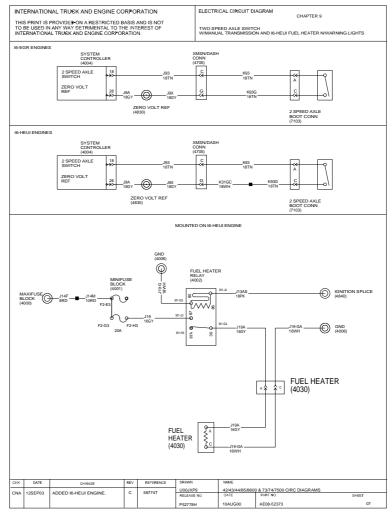


Figure 96 Two Speed Axle Switch With Manual Transmission and I6 HEUI Fuel Heater N/Warn Lights

BRAKE SYSTEM, HYDRAULIC, P. 8

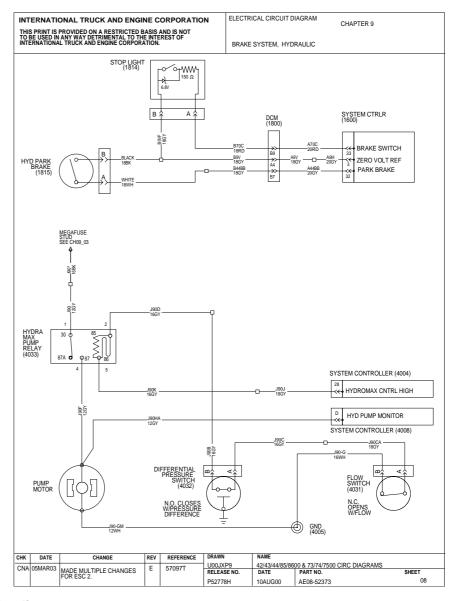


Figure 97 Brake System, Hydraulic

FUEL TRANSFER PUMP, P. 9

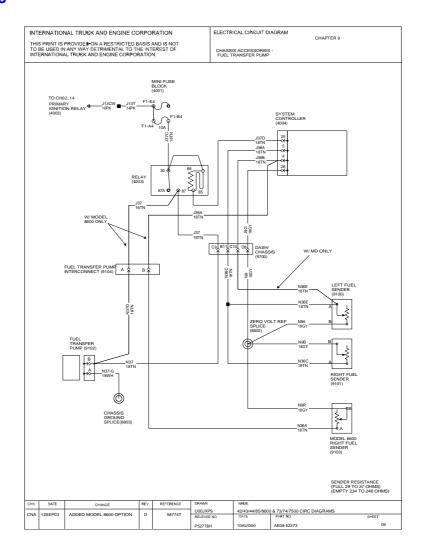


Figure 98 Fuel Transfer Pump

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

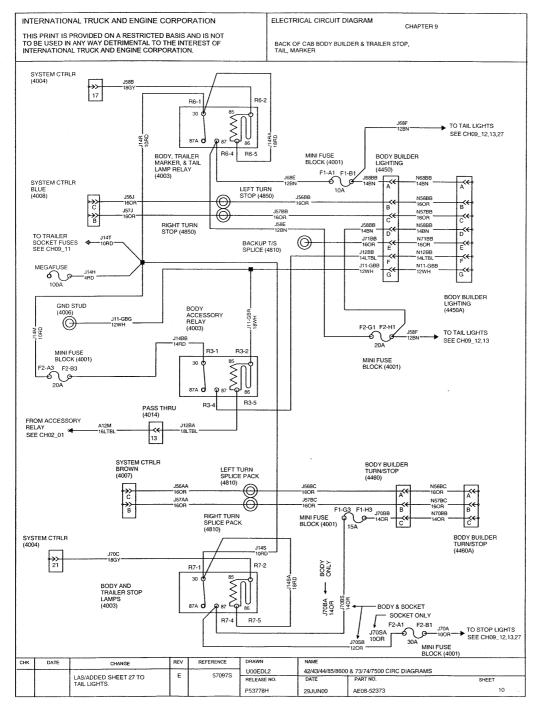


Figure 99 Back of Cab Body Builder and Trailer Stop, Tail, Marker

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

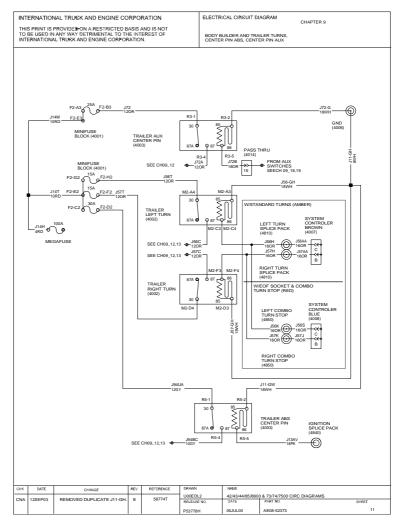


Figure 100 Body Builder and Trailer Turns, Center Pin ABS, Center Pin Aux

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

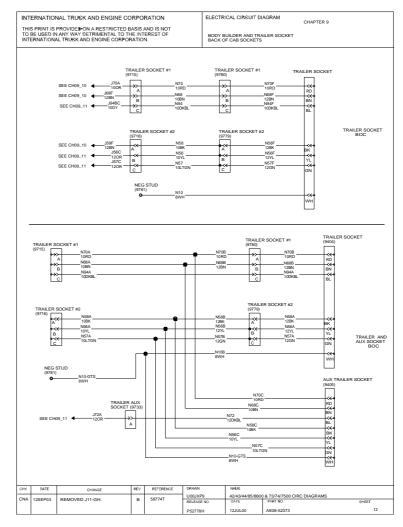


Figure 101 Body Builder and Trailer Socket Back of Cab Sockets

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

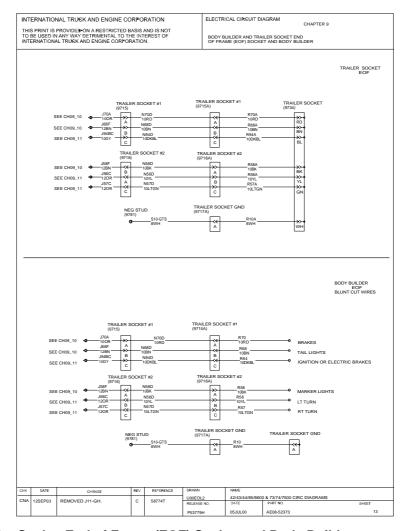


Figure 102 Body Builder and Trailer Socket End of Frame (EOF) Socket and Body Builder

AIR SOLENOID 4-WAY PACK, P. 14

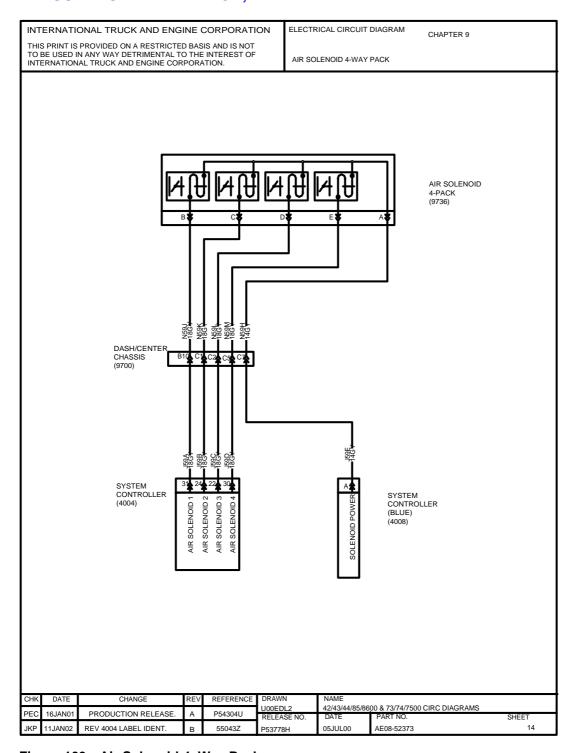


Figure 103 Air Solenoid 4-Way Pack

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

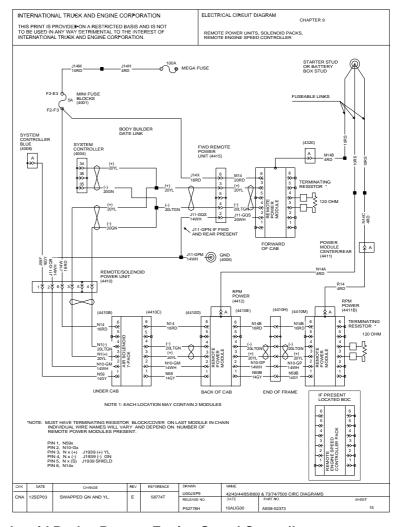


Figure 104 Remote Power Units, Solenoid Packs, Remote Engine Speed Controller

HYD POWER PARK, P. 16

INT	NTERNATIONAL TRUCK AND ENGINE CORPORATION			ELECTF	ELECTRICAL CIRCUIT DIAGRAM CHAPTER 9		
TO	THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF NTERNATIONAL TRUCK AND ENGINE CORPORATION.			CHASS	CHASSIS ACCESSORIES - HYD POWER PARK		
	DIAGRAM NOT AVAILABLE						
СНК	DATE	CHANGE	REV REFERENCE		NAME 42/42/44/95/	9600 \$ 72/74/7500 CIDC DIACDAMO	
PEC	16JAN01	PRODUCTION RELEASE.	A P54304U	U00EDL2 RELEASE NO. P52778H	DATE	8600 & 73/74/7500 CIRC DIAGRAMS PART NO.	SHEET
ட				F32//0FI	10JUL00	AE08-52373	16

Figure 105 HYD Power Park

AIR SUSPENSION, P. 17

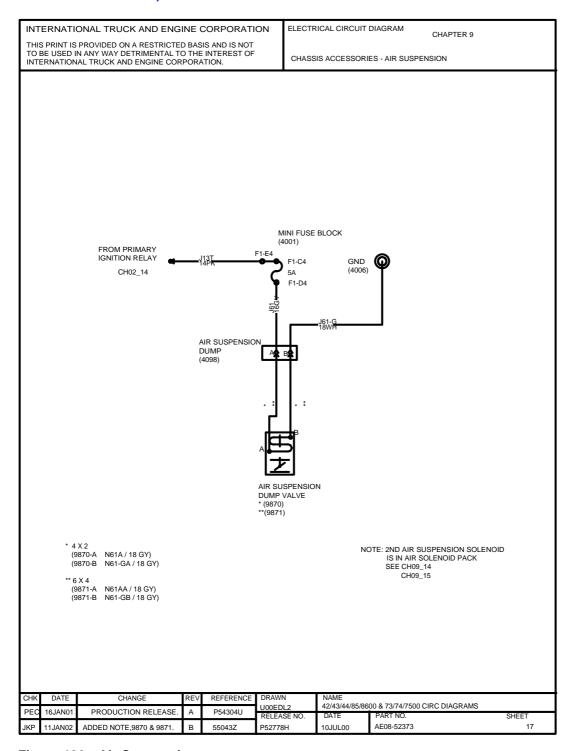


Figure 106 Air Suspension

AUX. TRAILER, ACC CONTROLLED, P. 18

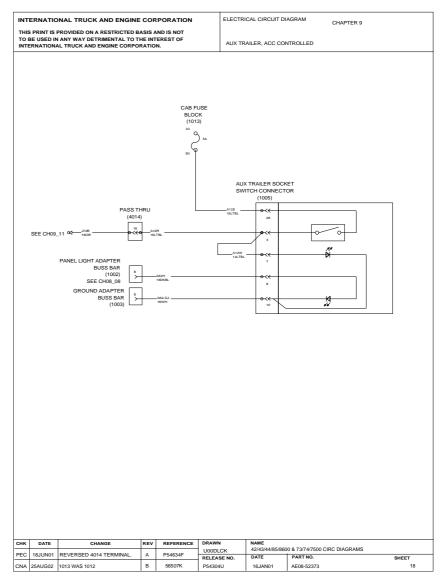


Figure 107 Aux. Trailer, Acc Controlled

AUX. TRAILER, BTRY CONTROLLED, P. 19

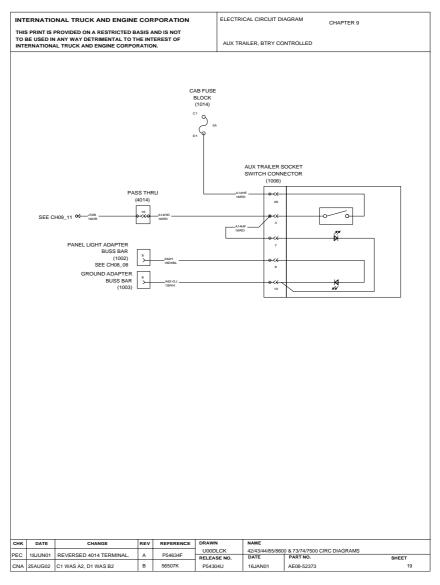


Figure 108 Aux. Trailer, Btry Controlled

LIFT AXLES (NON-STEERABLE), P. 20

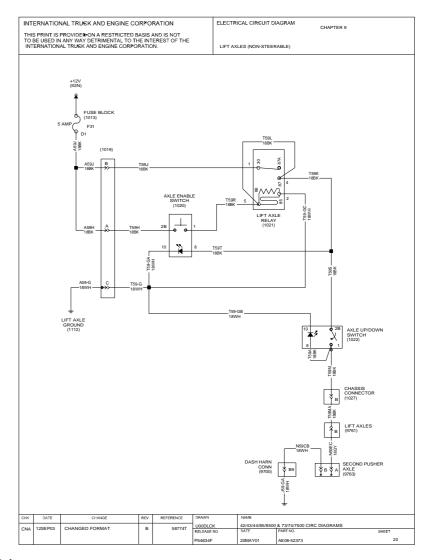


Figure 109 Lift Axles (Non-Steerable)

LIFT AXLES (STEERABLE), P. 21

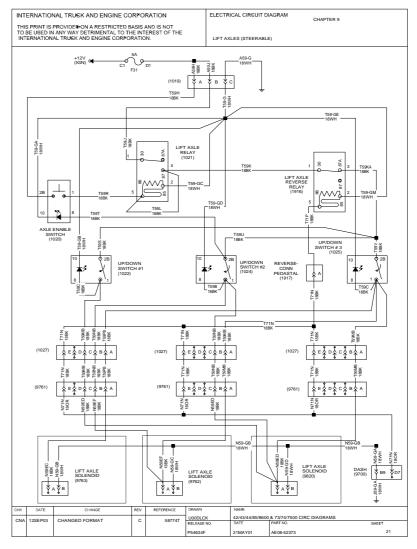


Figure 110 Lift Axles (Non-Steerable)

AIR ACTUATED PARK BRAKE, P. 22

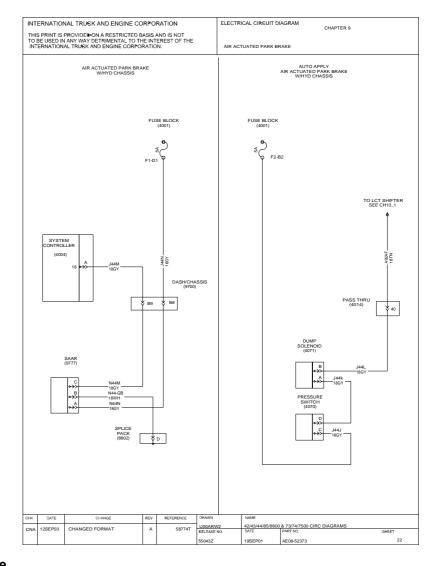


Figure 111 Air Actuated Park Brake

ANTILOCK BRAKE SYSTEM, WABCO AIR, P. 23

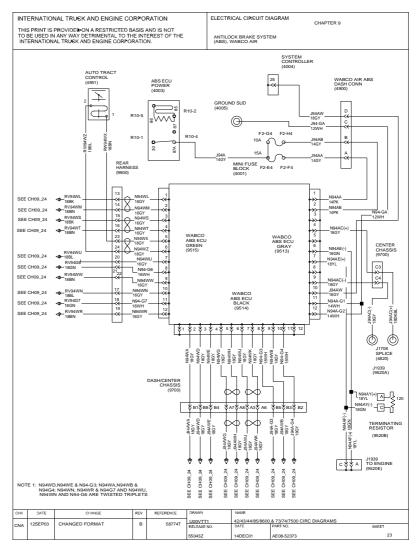


Figure 112 Antilock Brake System, WABCO Air

ANTILOCK BRAKE SYSTEM, WABCO AIR, P. 24

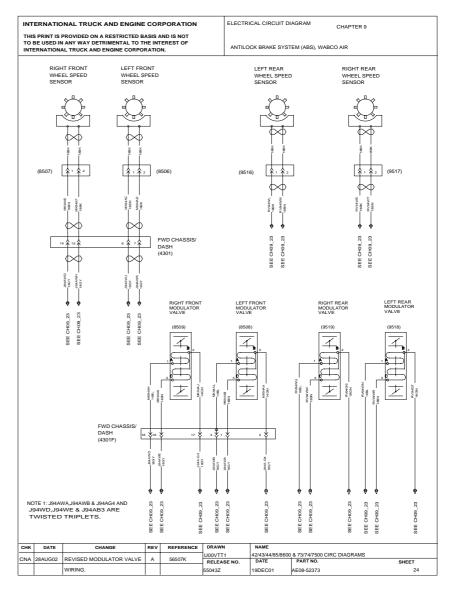


Figure 113 Antilock Brake System, WABCO Air

LIFT AXLES, WITH NON—STEERABLE FOR SS MODELS, P. 25

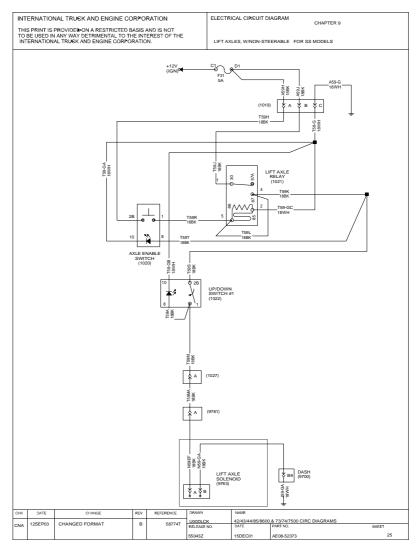


Figure 114 Lift Axles, With Non—Steerable for SS Models

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

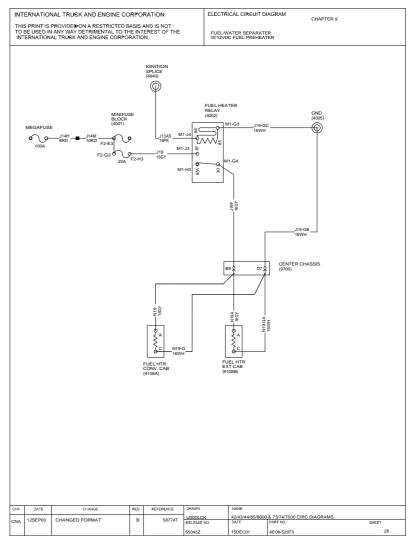


Figure 115 Fuel / Water Separator With 12VDC Fuel Preheater

ELECTRONIC TRAILER BRAKE ACCOMMODATION, P. 27

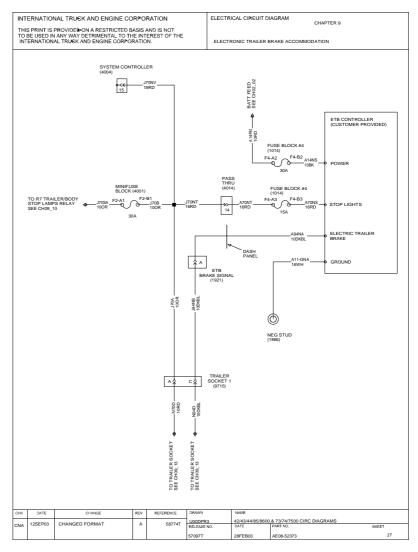


Figure 116 Electronic Trailer Brake Accommodation

LECTRASHIFT ACCOMMODATION, P. 28

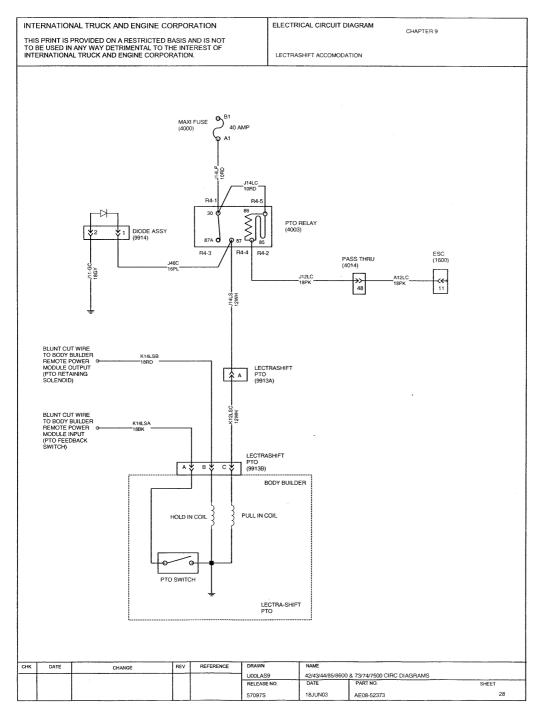


Figure 117 Lectrashift Accommodation

AUXILIARY 40 AMP CIRCUIT, P. 29

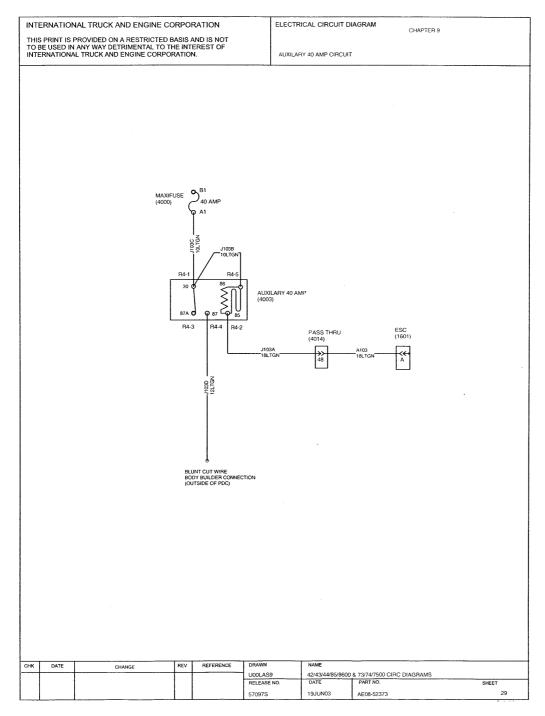


Figure 118 Auxiliary 40 Amp Circuit

HOURMETER, CUSTOMER MOUNTED PTO, P. 30

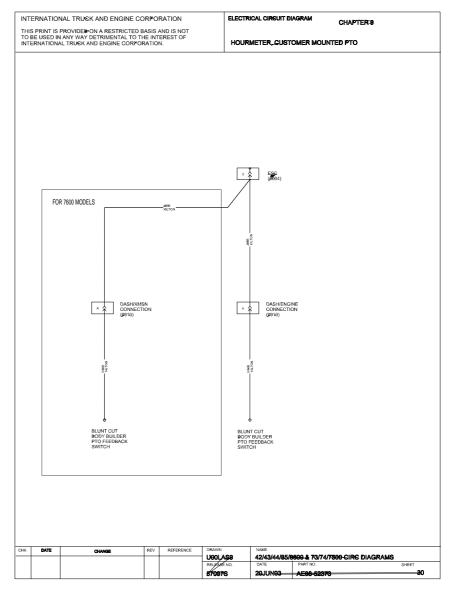


Figure 119 Hourmeter, Customer Mounted PTO

REMOTE START/STOP, P. 31

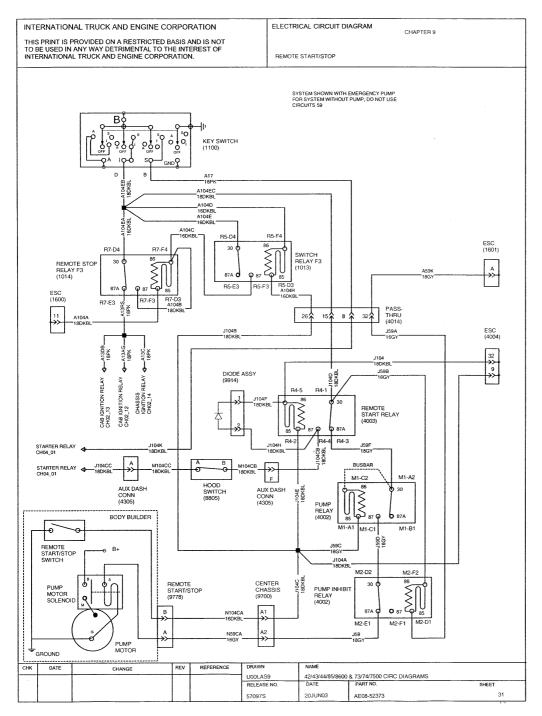


Figure 120 Remote Start/ Stop

LIFT AXLE WITH 14RAR, P. 32

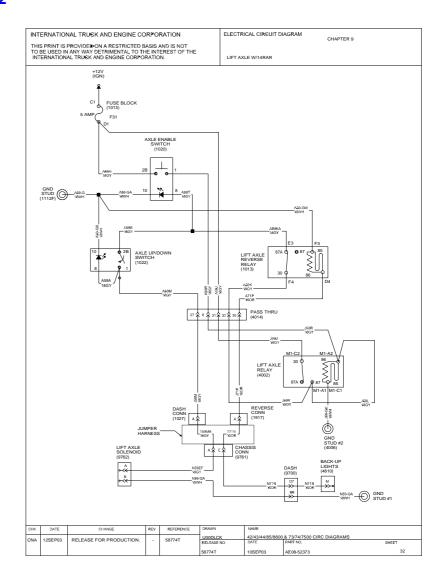


Figure 121 Lift Axle with 14RAR

LIFT GATE, P. 33

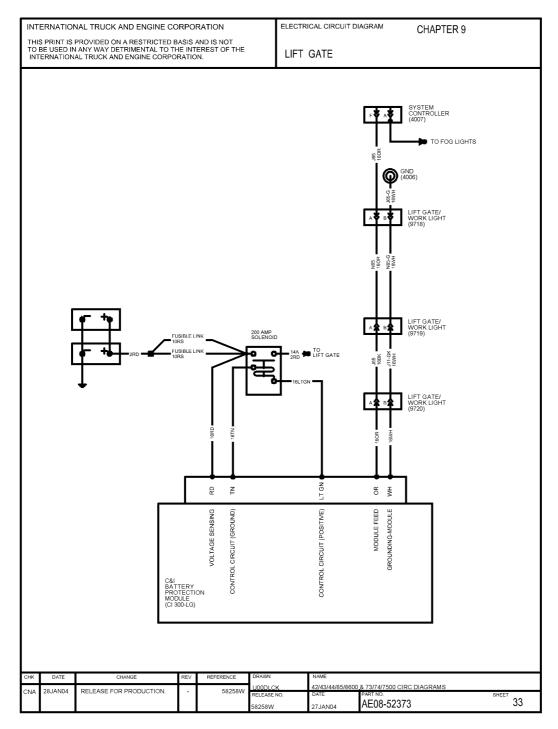


Figure 122 Lift Gate

LIFT AXLE MULTIPLEX, P. 34

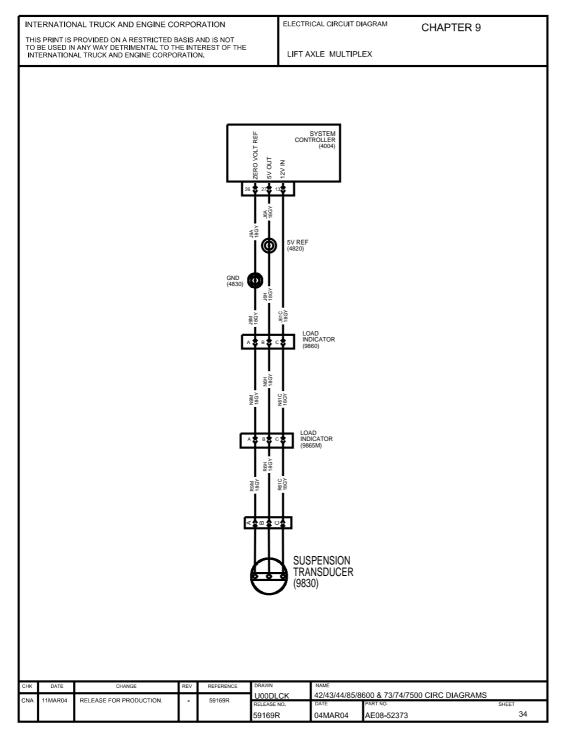


Figure 123 Lift Axle Multiplex

TRANSMISSIONS (CHAPTER 10)

ALLISON LCT TRANSMISSION OR ALLISON 1000, 2000, 2400, P. 1

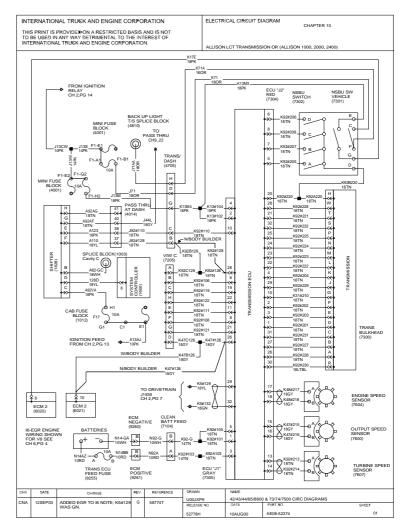


Figure 124 Allison LCT Transmission or Allison 1000, 2000, 2400

ALLISON MD TRANSMISSION, P. 2

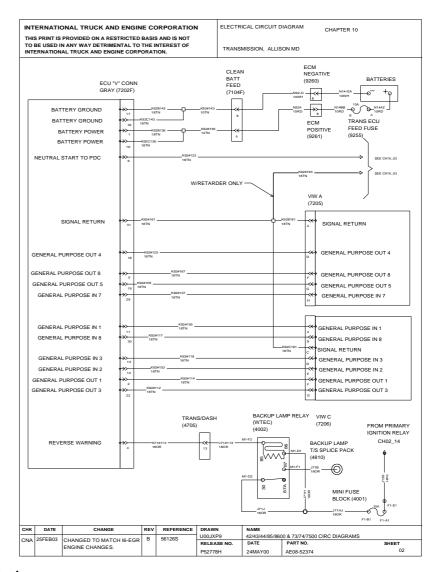


Figure 125 Allison MD Transmission

ALLISON MD TRANSMISSION (WTEC), P. 3

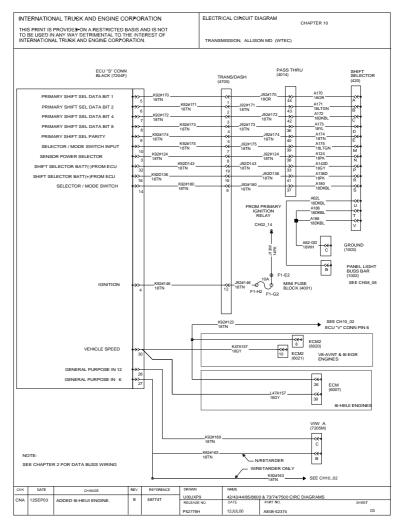


Figure 126 Allison MD Transmission (WTEC)

ALLISON MD TRANSMISSION (CONT.), P. 4

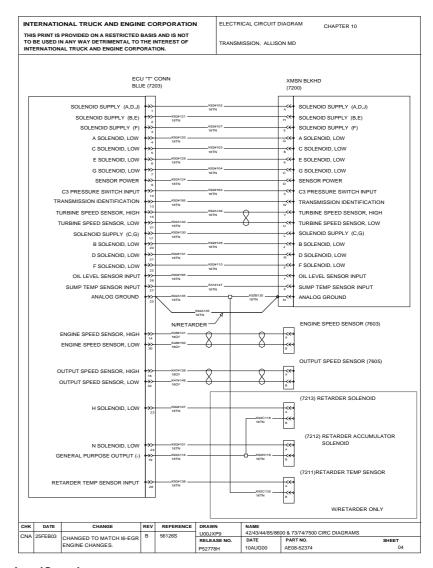


Figure 127 Allison MD Transmission (Cont.)

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

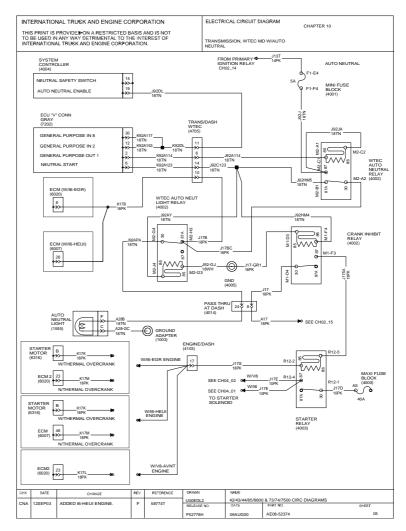


Figure 128 Transmission, WTEC MD W/Auto Neutral

EATON AUTOSHIFT TRANSMISSION, P. 6

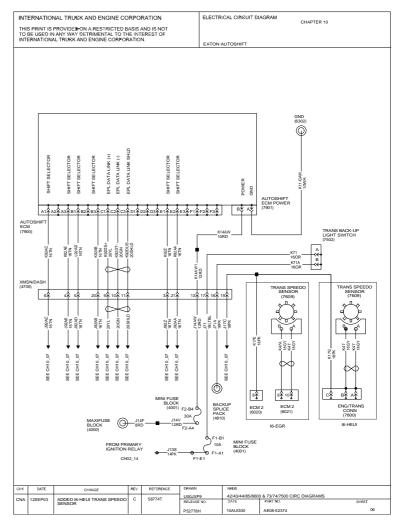


Figure 129 Eaton Autoshift Transmission

EATON AUTOSHIFT TRANSMISSION (CONT.), P. 7

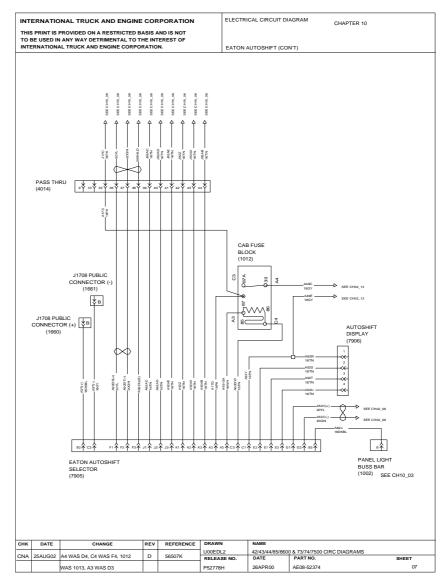


Figure 130 Eaton Autoshift Transmission (Cont.)

EATON LIGHTNING TRANSMISSION, P. 8

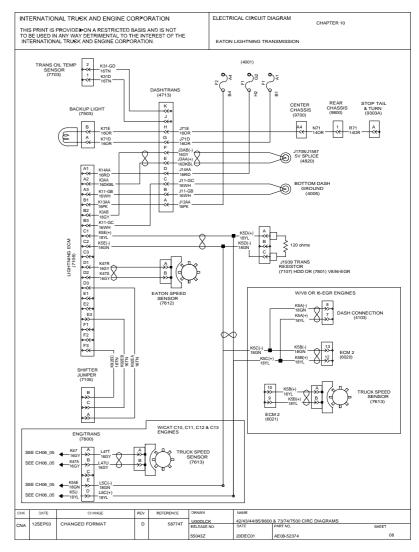


Figure 131 Eaton Lightning Transmission

ALLISON HD TRANSMISSION, P. 9

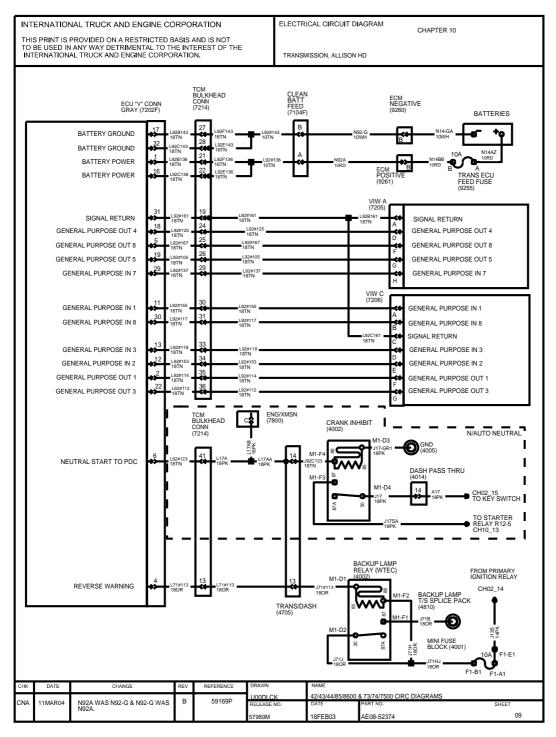


Figure 132 Allison HD Transmission

ALLISON HD TRANSMISSION, P. 10

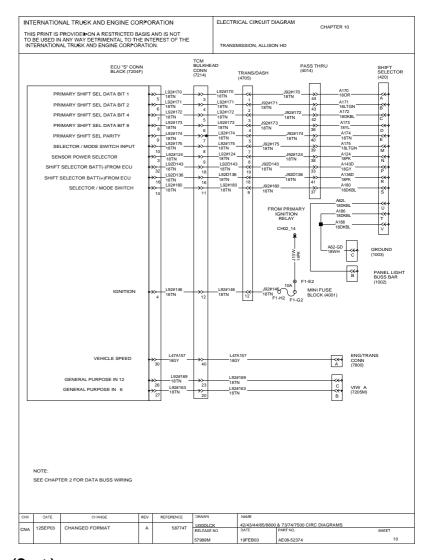


Figure 133 Allison HD Transmission (Cont.)

ALLISON HD TRANSMISSION, P. 11

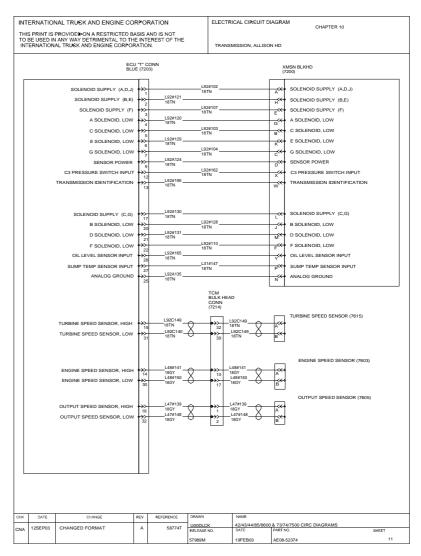


Figure 134 Allison HD Transmission (Cont.)

ALLISON HD TRANSMISSION WITH AUTO NEUTRAL, P. 12

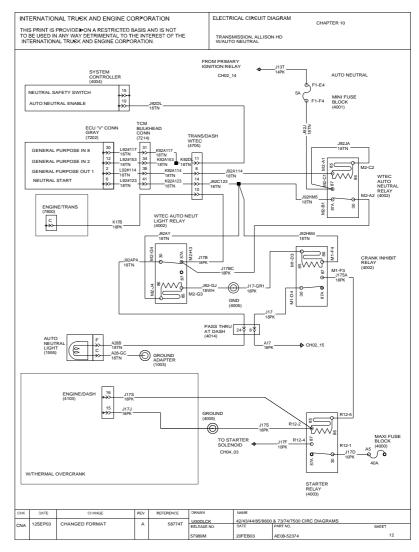


Figure 135 Allison HD Transmission With Auto Neutral

ALLISON HD TRANSMISSION WITH AUTO NEUTRAL AND WITH 0013WUA, P. 13

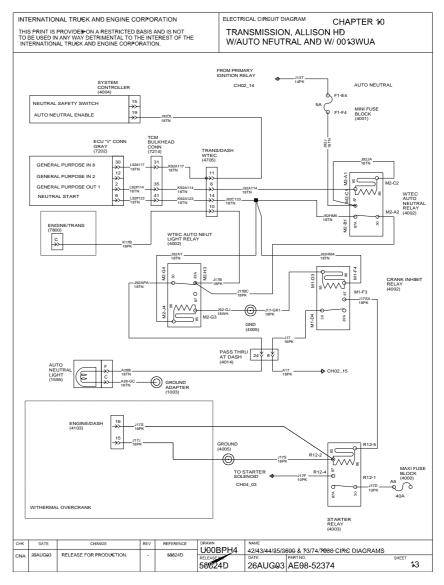


Figure 136 Allison HD Transmission With Auto Neutral and with 0013WUA

ALLISON LCT TRANSMISSION (ALLISON 1000, 2000, 2400) WITH 16 HEUI, P. 14

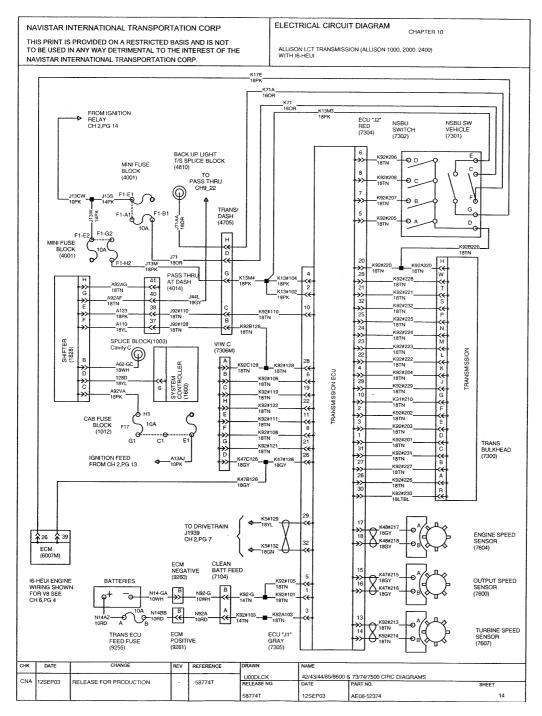


Figure 137 Allison LCT Transmission (Allison 1000, 2000, 2400) with I6 HEUI

TRANSMISSION RETARDER CONTROL WIRING WITH MD XMSN, HARD WIRED EFFECTS, P. 15

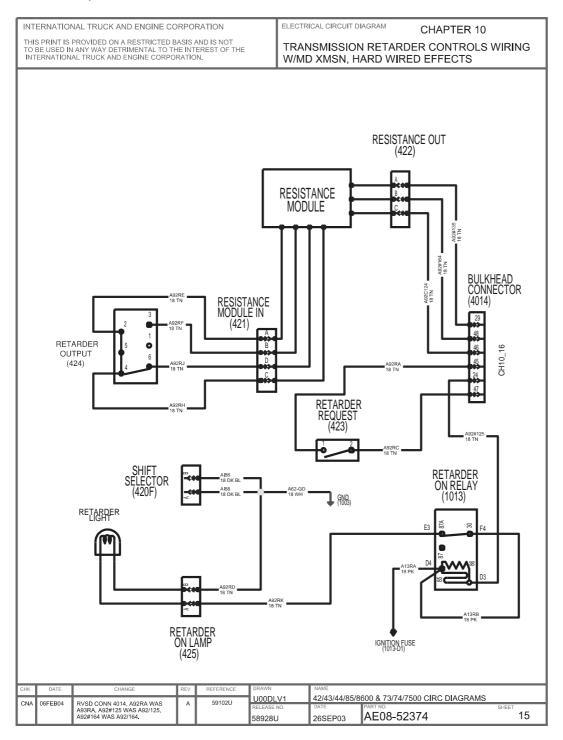


Figure 138 Transmission Retarder Control Wiring with MD Transmission, Hard Wired Effects

TRANSMISSION RETARDER CONTROL WIRING WITH MD XMSN, HARD WIRED EFFECTS, P. 16

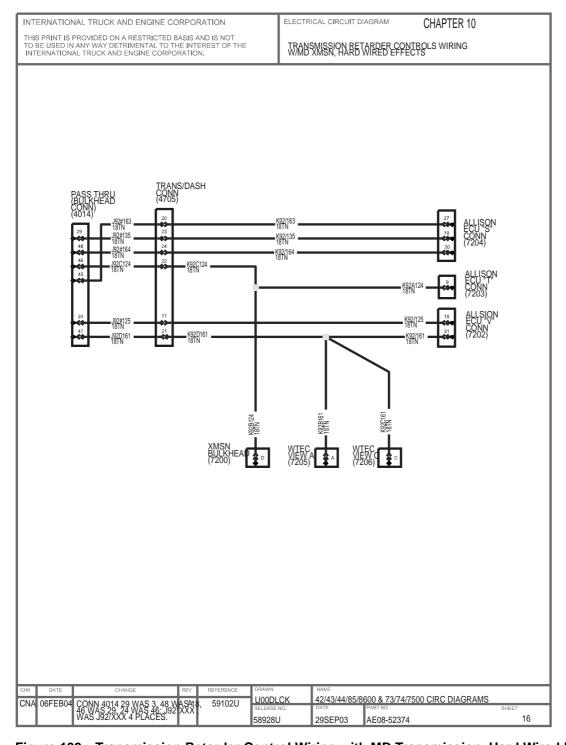


Figure 139 Transmission Retarder Control Wiring with MD Transmission, Hard Wired Effects

AIR CONDITIONING (CHAPTER 11)

HVAC SYSTEMS, P. 1

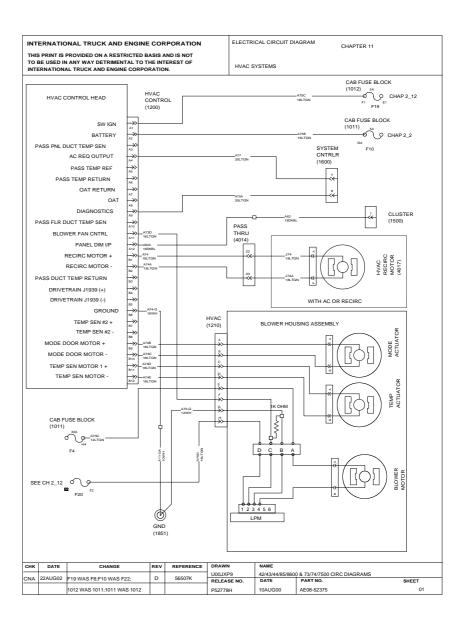


Figure 140 HVAC Systems

AIR CONDITIONING (ONLY), P. 2

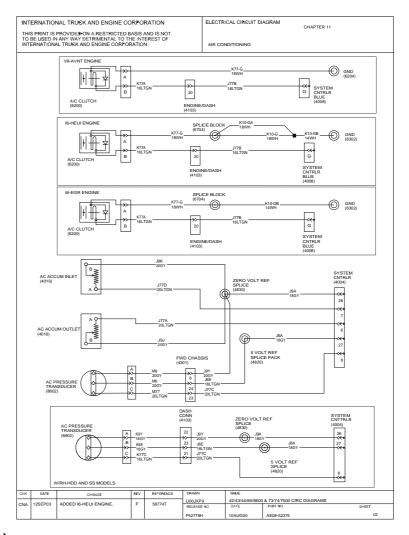


Figure 141 Air Conditioning (Only)

AUTOTHERM SYSTEMS, P. 3

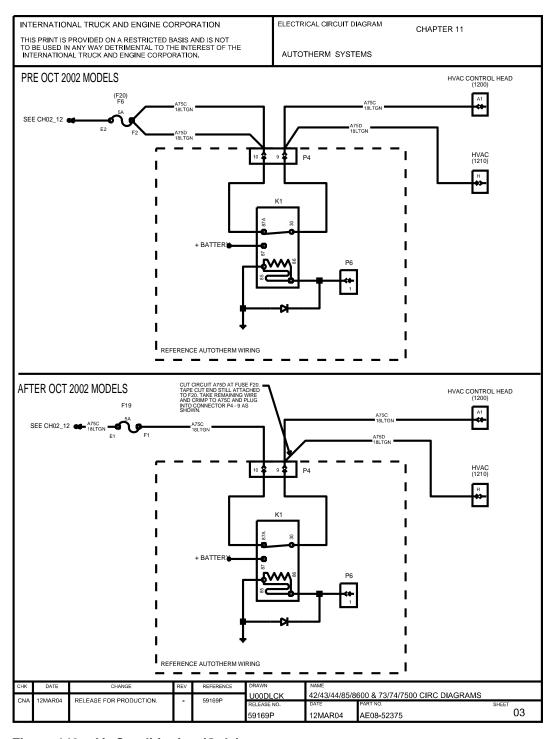


Figure 142 Air Conditioning (Only)