

INSTRUCTIONS AND CHARTS (CHAPTER 2)

2.1. ABBREVIATIONS, P. 1

NAVISTAR, INC				ELECTRICAL CIRCUIT DIAGRAM	
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF NAVISTAR, INC.				CHAPTER 2	
ABBREVIATIONS					
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
ACCESS	ACCESSORY	CUR	CURRENT	PRESS	PRESSURE
AC	AIR CONDITIONING	DPNL	DASHBOARD	RAD	RADIO
AIR CLNR	AIR CLEANER	DFTR	DEFLECTOR	RR	REAR
ALT	ALTERNATOR	DFR	DEFROSTER	RLY	RELAY
AC	ALTERNATING CURRENT	DEG	DEGREE	RES	RESISTOR
AFTR	AFTERTREATMENT	DIAG	DIAGRAM	R	RIGHT
AMM	AMMETER	DSL	DIESEL	RTR	ROTOR
AMP	AMPERE	DIFF	DIFFERENTIAL	SNSR	SENSOR
AMP HR	AMPERE HOUR	DIMR	DIMMER	SHLD	SHIELD
AMPL	AMPLIFIER	ELEC	ELECTRICAL	SHFT	SHIFTER
ARM	ARMATURE	ELEX	ELECTRONICS	SLPR	SLEEPER
ARSR	ARRESTER	ENG	ENGINE	SLV	SLEEVE
ASSY	ASSEMBLY	EXH	EXHAUST	SPKR	SPEAKER
AUX	AUXILIARY	FL	FLUID	SPR	SPRING
B/U	BACK-UP	FWD	FORWARD	STD	STANDARD
BTRY	BATTERY	FR	FRONT	STRG	STEERING
BM	BENCHMARKING	FREQ	FREQUENCY	STLITE	SATELLITE
BLK	BLOCK	GA	GAUGE	SUNSH	SUNSHADE
BOOS	BOOSTER	GEN	GENERATOR	SW	SWITCH
BOT	BOTTOM	GND	GROUND	SYS	SYSTEM
BK	BRAKE	HARN	HARNESS	TACH	TACHOMETER
BRKR	BREAKER	HDLP	HEADLAMP	TEMP	TEMPERATURE
BRTHR	BREATHER	HTD	HEATED	TERM	TERMINAL
BRI	BRIGHT	HT TR	HEAT TREAT	THROT	THROTTLE
BUZ	BUZZER	HTR	HEATER	THRU	THROUGH
CA	CABLE	HP	HORSEPOWER	TRLR	TRAILER
CD	CANDELA	HYD	HYDRAULIC	XPCR	TRANSDUCER
CP	CANDLEPOWER	ID	IDENTIFICATION	XFER	TRANSFER
CAP	CAPACITOR	IGN	IGNITION	XFMR	TRANSFORMER
CAT	CATERPILLAR	ILLUM	ILLUMINATION	XSTR	TRANSISTOR
CHAS	CHASSIS	IND	INDICATOR	XMSN	TRANSMISSION
CH	CHOKE	INST	INSTRUMENT	XMTR	TRANSMITTER
CIRC	CIRCUIT	INT	INTERMITTENT	TRK	TRUCK
CLK	CLOCK	L	LEFT	UPR	UPPER
CW	CLOCKWISE	LT	LIGHT	VLV	VALVE
CLSTR	CLUSTER	LTR	LIGHTER	VERT	VERTICAL
CL	CLUTCH	LWR	LOWER	VM	VOLTMETER
COL	COLUMN	MAG	MAGNET	VOL	VOLUME
COMM	COMMUTATOR	MOD	MODULATOR	WSHR	WASHER
CMPNT	COMPONENT	MDL	MODULE	WHL	WHEEL
CPRSR	COMPRESSOR	MOT	MOTOR	WDO	WINDOW
CONN	CONNECT	MTD	MOUNTED	WSHLD	WINDSHIELD
CONT	CONTINUED	NEG	NEGATIVE	WPR	WIPER
CSL	CONSOLE	N/	NOT WITH	W/	WITH
CONT	CONTACT	NO.	NUMBER	W/O	WITHOUT
CONT	CONTROL	PASS	PASSENGER		
CONV	CONVERTER	POSN	POSITION		
CLR	COOLER	POS	POSITIVE		
CTSY	COURTESY	POT	POTENTIOMETER		
CRUS	CRUISE	PWR	POWER		

CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME
DLV1	11JAN11	INITIAL RELEASE.	A	61879Y	300011	CIRCUIT DIAGRAM, PAYSTAR
					RELEASE NO.	DATE
					61879Y	12MAY09
						PART NO.
						AE08058081
						SHEET
						001

Figure 1 Abbreviations

2.11. SCHEMATIC SYMBOL CHART (CONT.), P. 11

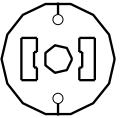
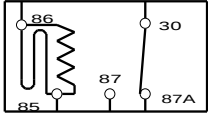
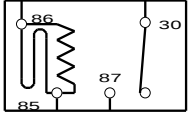
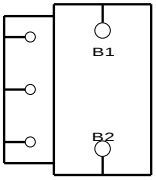
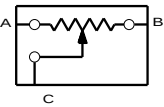
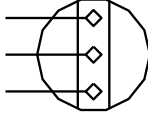
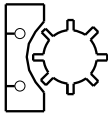
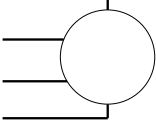
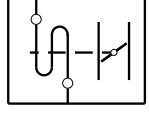
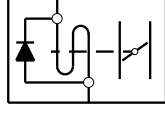
NAVISTAR, INC					ELECTRICAL CIRCUIT DIAGRAM				
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF NAVISTAR, INC.					CHAPTER 2				
					SCHEMATIC SYMBOL CHART (CONT)				
SYMBOL					DESCRIPTION				
					MALE TERMINAL				
					MOTOR				
					PASS THRU CONNECTION				
					PRESSURE SWITCH				
					RELAY, FIVE TERMINAL				
					RELAY, FOUR TERMINAL				
					RELAY, LATCHING				
SYMBOL					DESCRIPTION				
					RESISTOR				
					SENDER - FUEL, OIL, TEMP, WATER				
					SENSOR, PRESSURE. ABS 6				
					SENSOR, MAGNETIC				
					SENSOR, YAW				
					SOLENOID				
					SOLENOID W/ DIODE				
CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME			
DLV1	11JAN11	INITIAL RELEASE.	A	61879Y	300011	CIRCUIT DIAGRAM, PAYSTAR			
					RELEASE NO.	DATE	PART NO.	SHEET	
					61879Y	12MAY09	AE08058081	011	

Figure 11 Schematic Symbol Chart (Cont.)

3.7. BATTERY FEED WITHOUT ENGINE BRAKE, P. 4

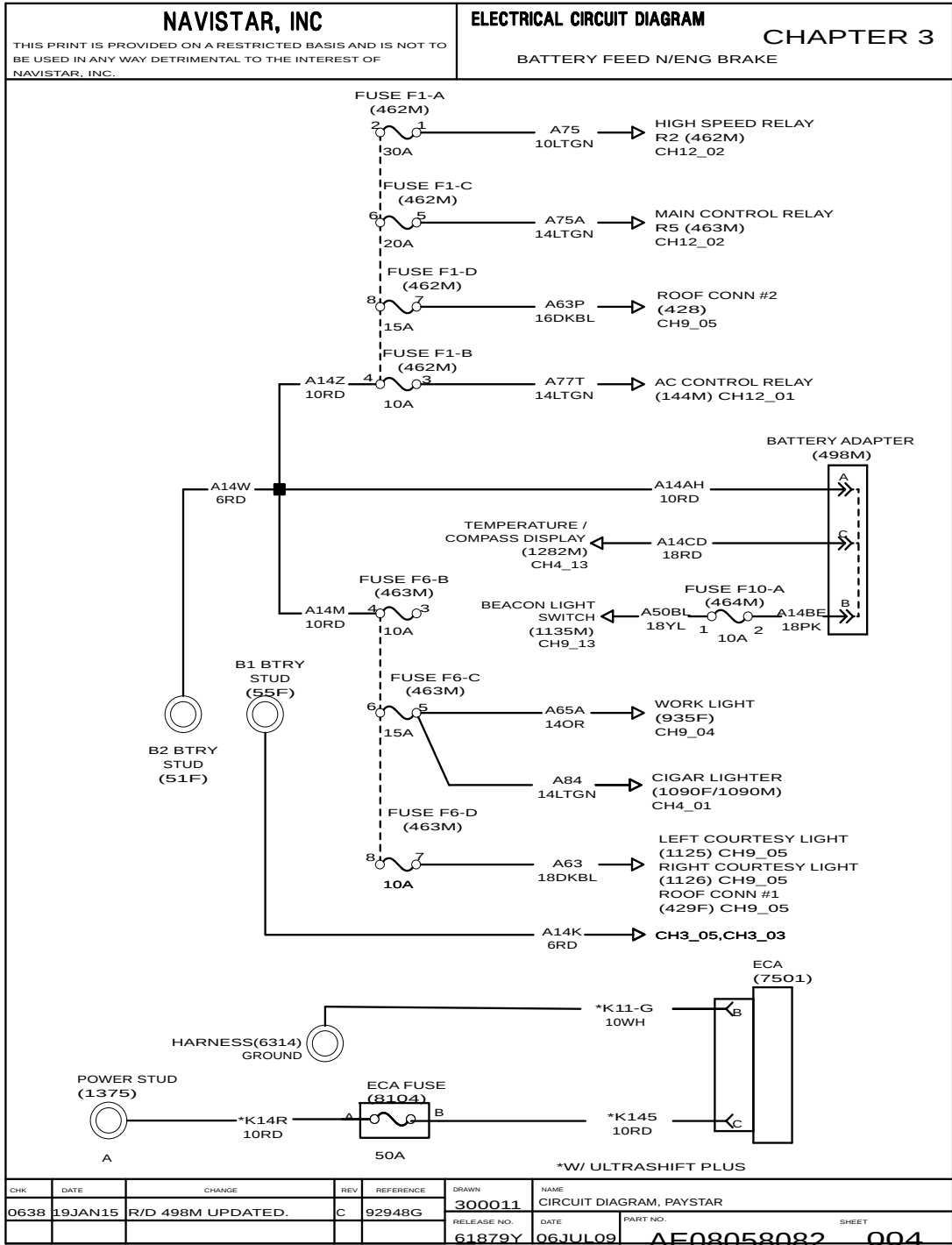
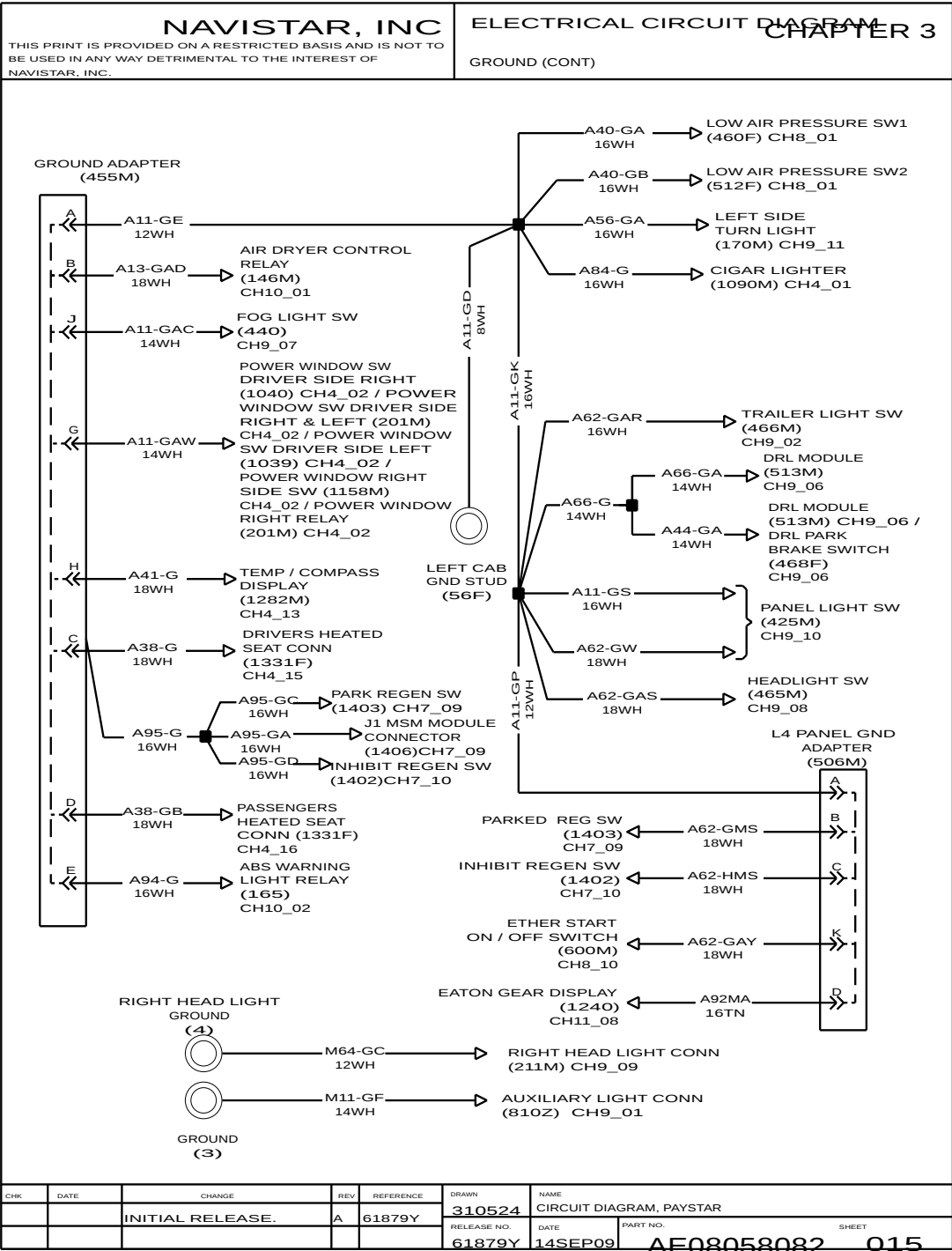


Figure 19 Battery Feed without Engine Brake

3.24. GROUND (CONT.), P. 15



4.12. ELECTRIC LOCK – RIGHT AND LEFT, P. 12

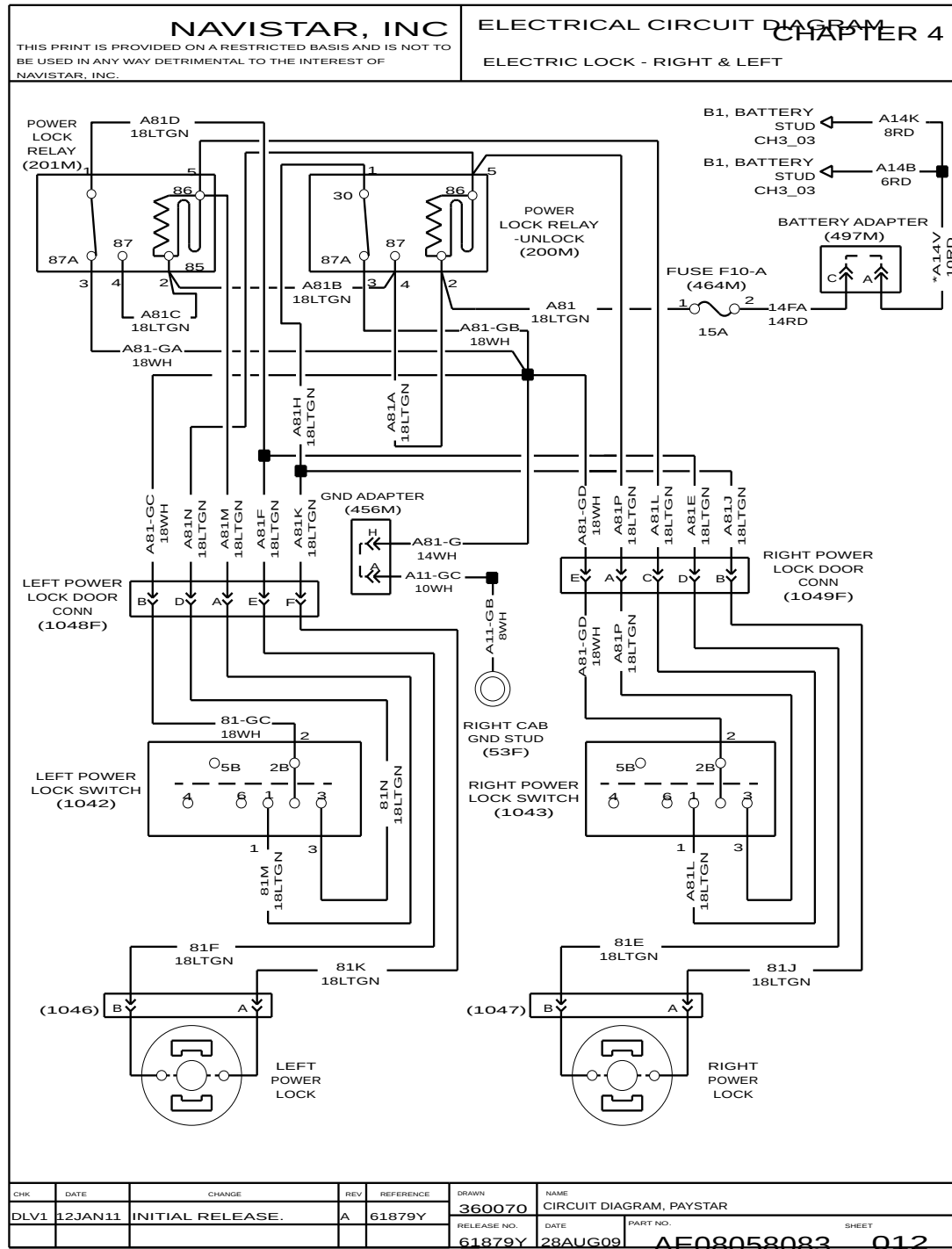


Figure 59 Electric Lock – Right and Left

7.19. ELECTRONIC ENGINE CONTROLS (IBB ENGINE) – SCR EFFECTS, P. 14

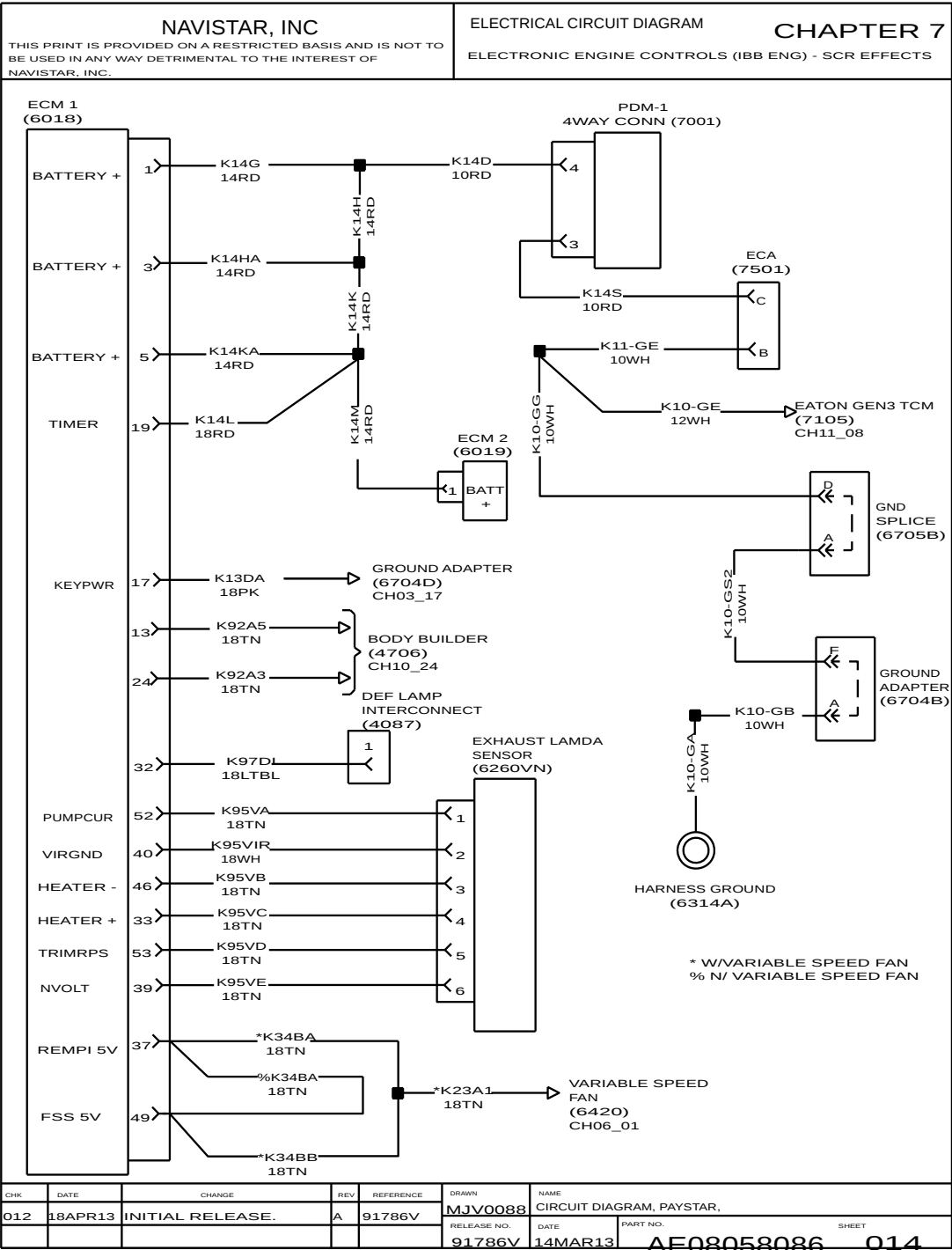


Figure 92 Electronic Engine Controls (IBB Engine) – SCR Effects

8.5. TRANSMISSION OIL TEMPERATURE GAUGE, AXLE FORWARD-REAR AND REAR-REAR TEMPERATURE GAUGE, P. 5

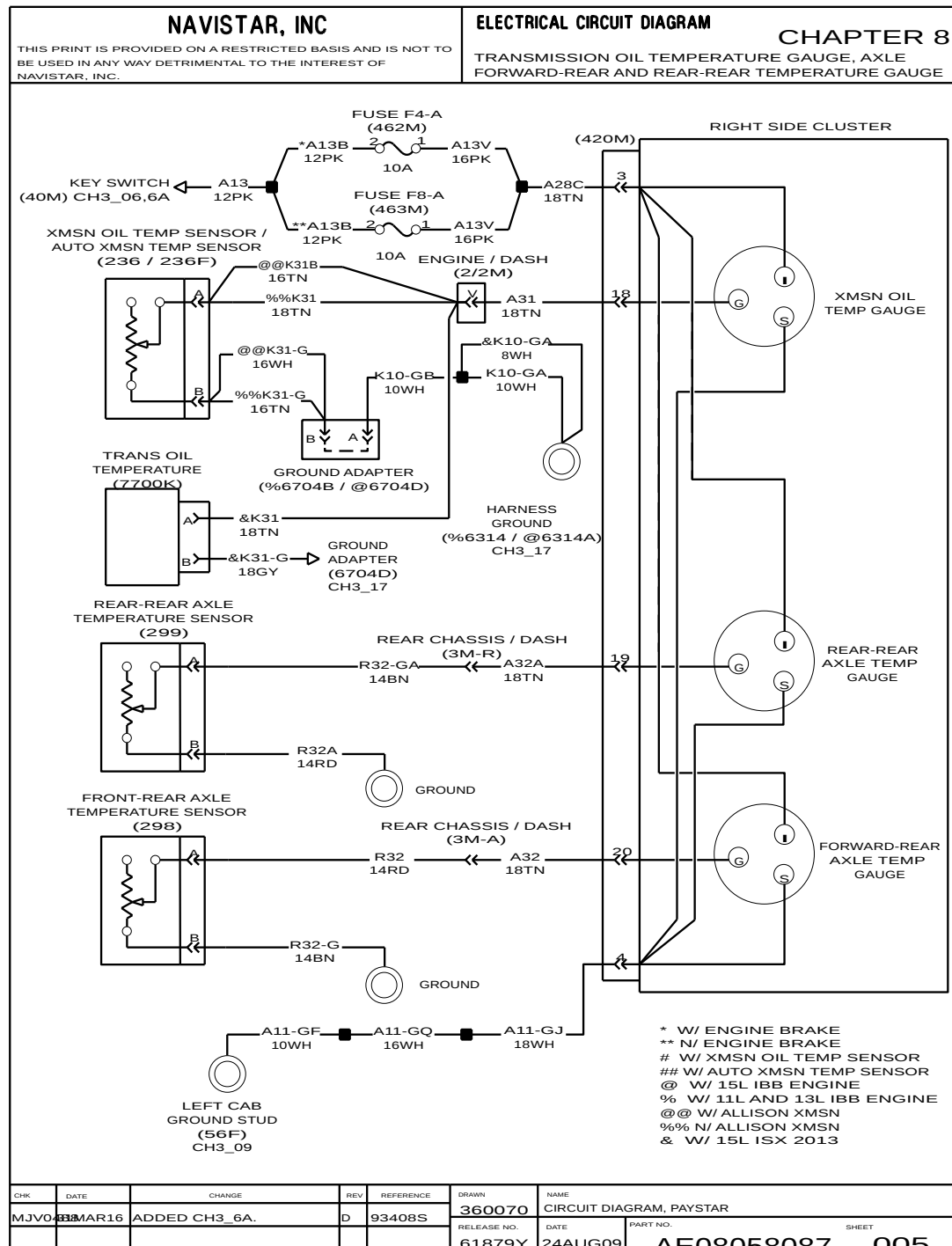


Figure 113 Transmission Oil Temperature Gauge, Axle Forward-Rear and Rear-Rear Temperature Gauge

10.6. BENDIX AIR ABS 6CH WITH ATC, P. 6

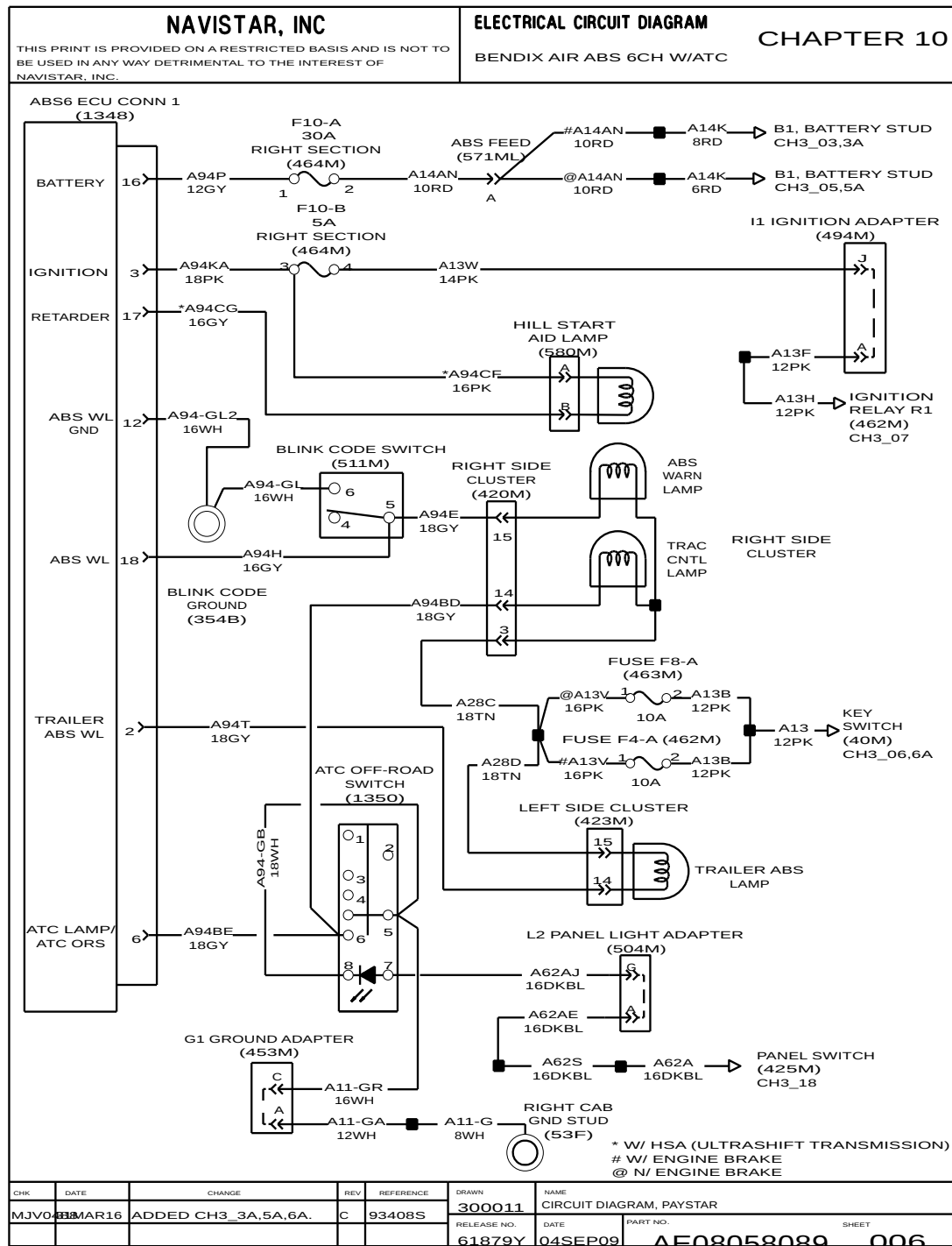


Figure 139 Bendix Air ABS 6CH with ATC

11.6. ALLISON TRANSMISSION WITH AUTO NEUTRAL, P. 4

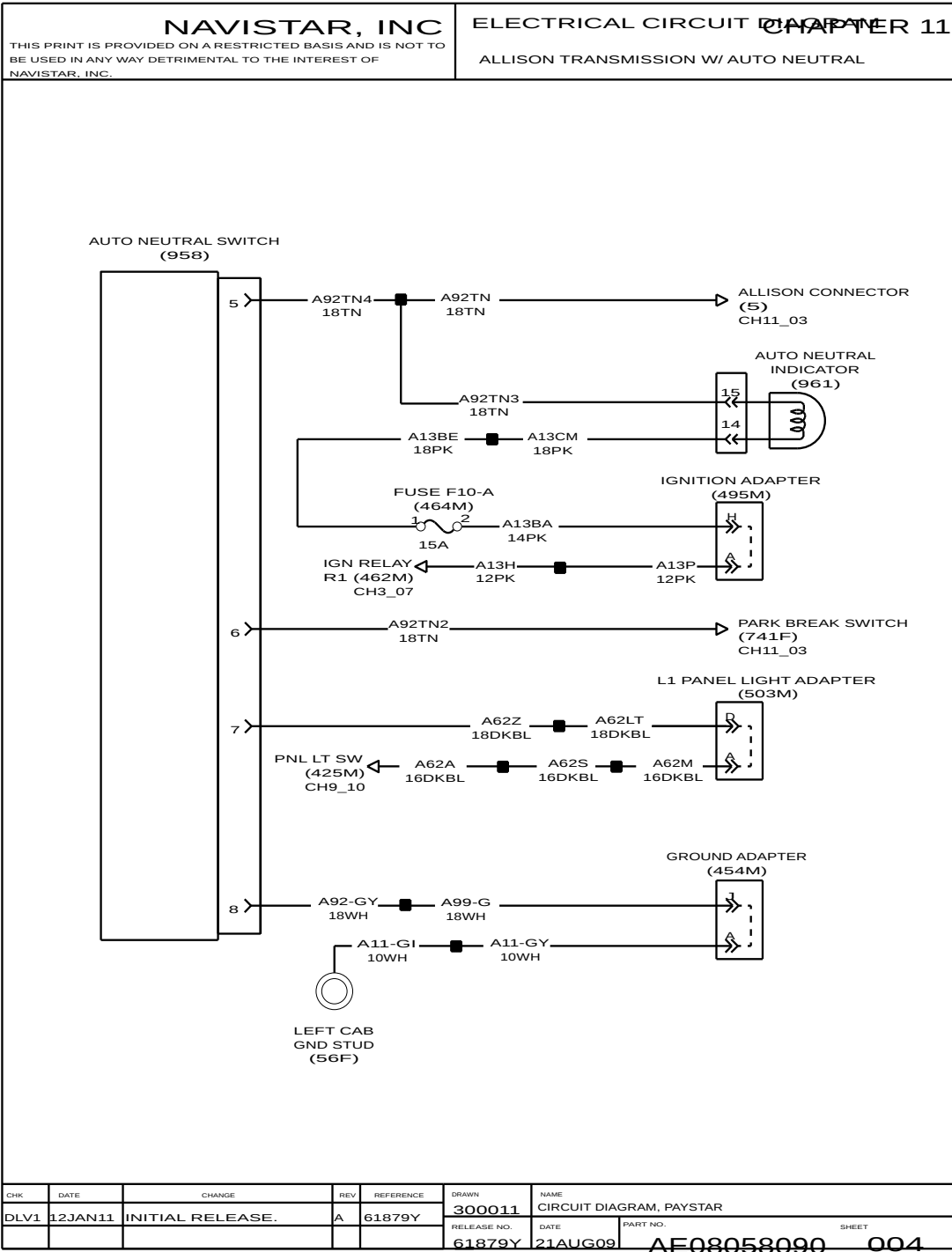


Figure 165 Allison Transmission with Auto Neutral

11.19. EATON ULTRASHIFT GEN III WITH PUSHBUTTON SHIFT, P. 10

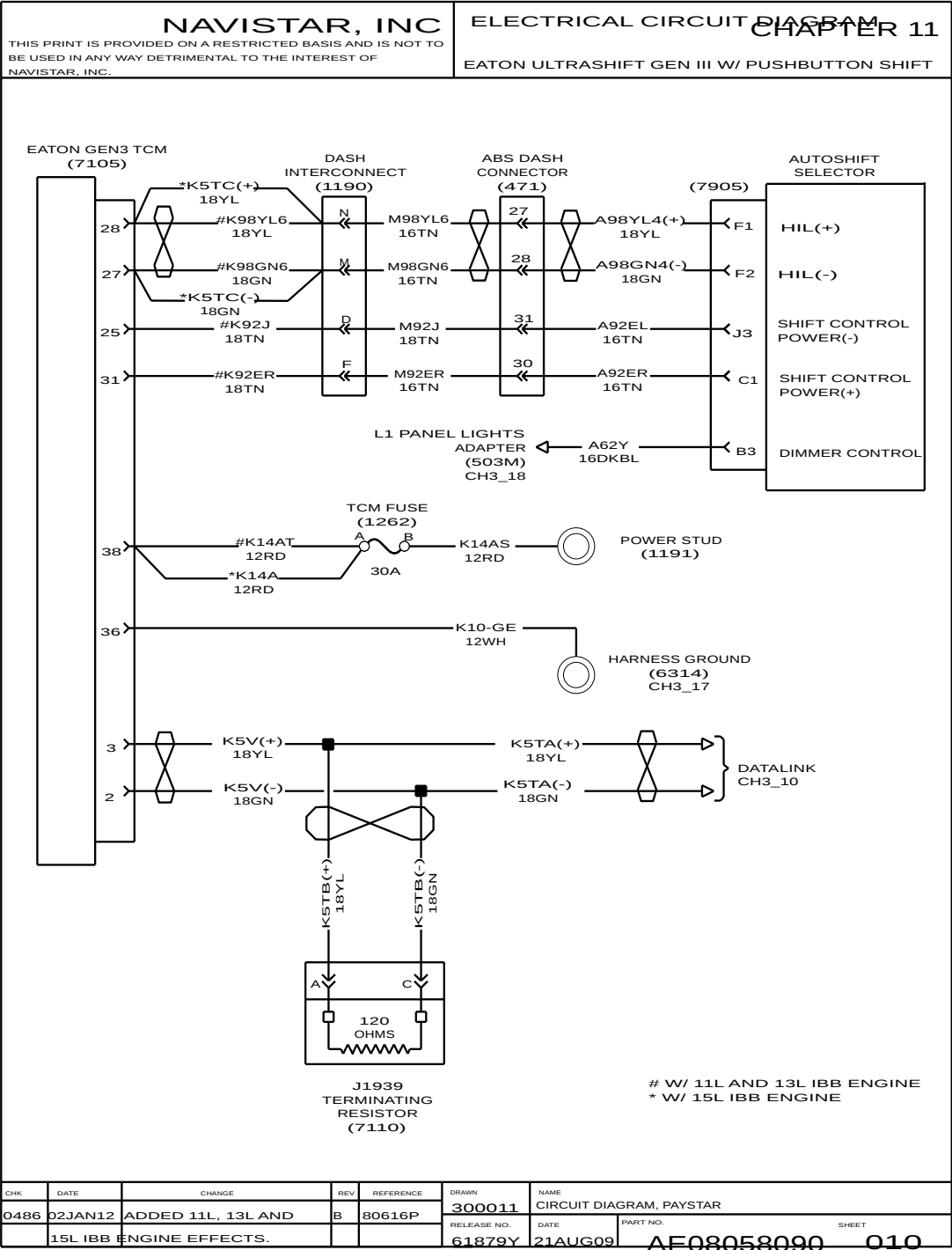


Figure 178 Eaton Ultrashift GEN III with Pushbutton Shift

13.31. CONNECTOR COMPOSITES (267M / *275 / 289F / 290F / 291), P. 25

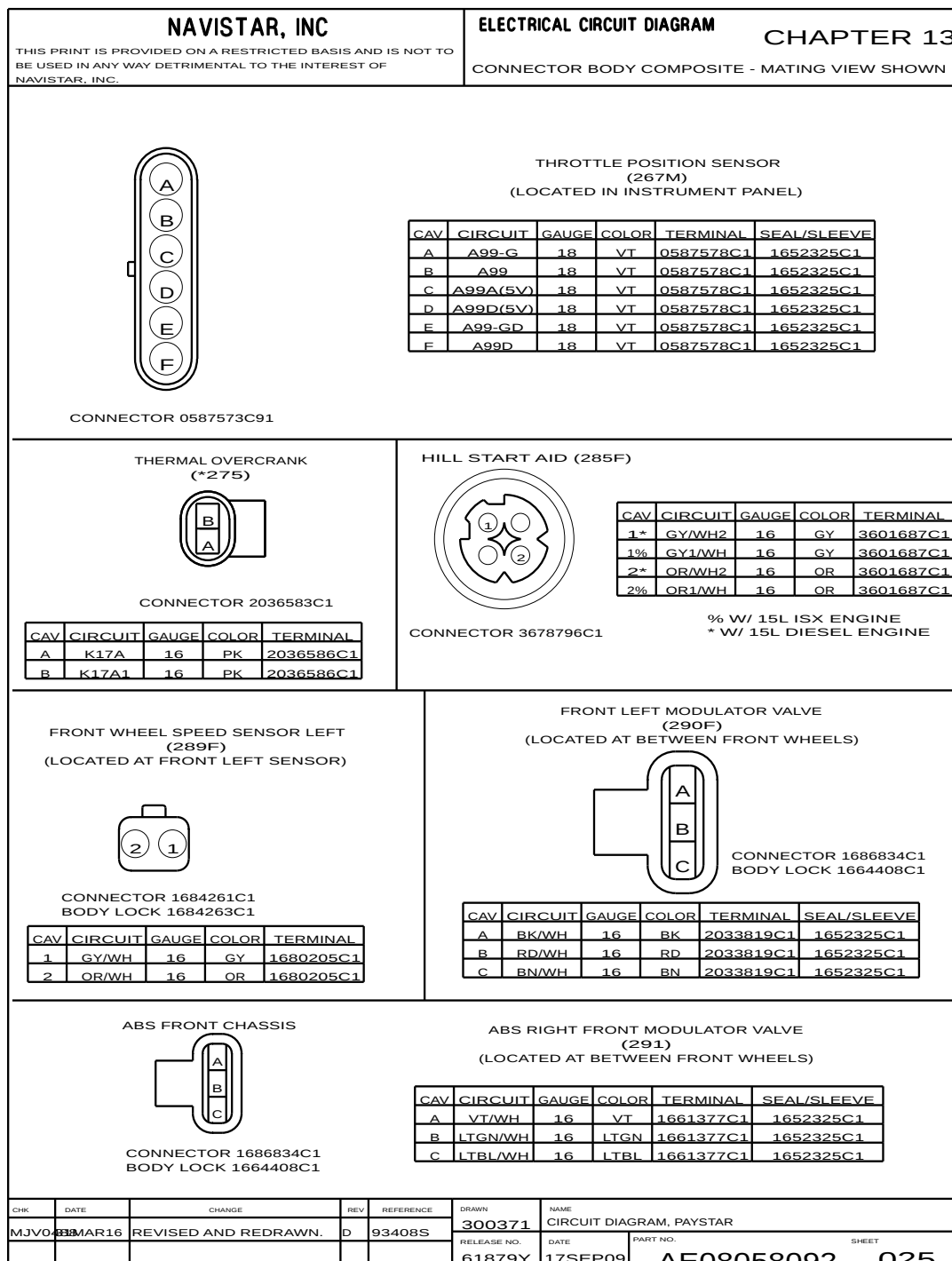


Figure 218 Connector Composites (267M / *275 / 289F / 290F / 291)

13.85. CONNECTOR COMPOSITES (685), P. 67H

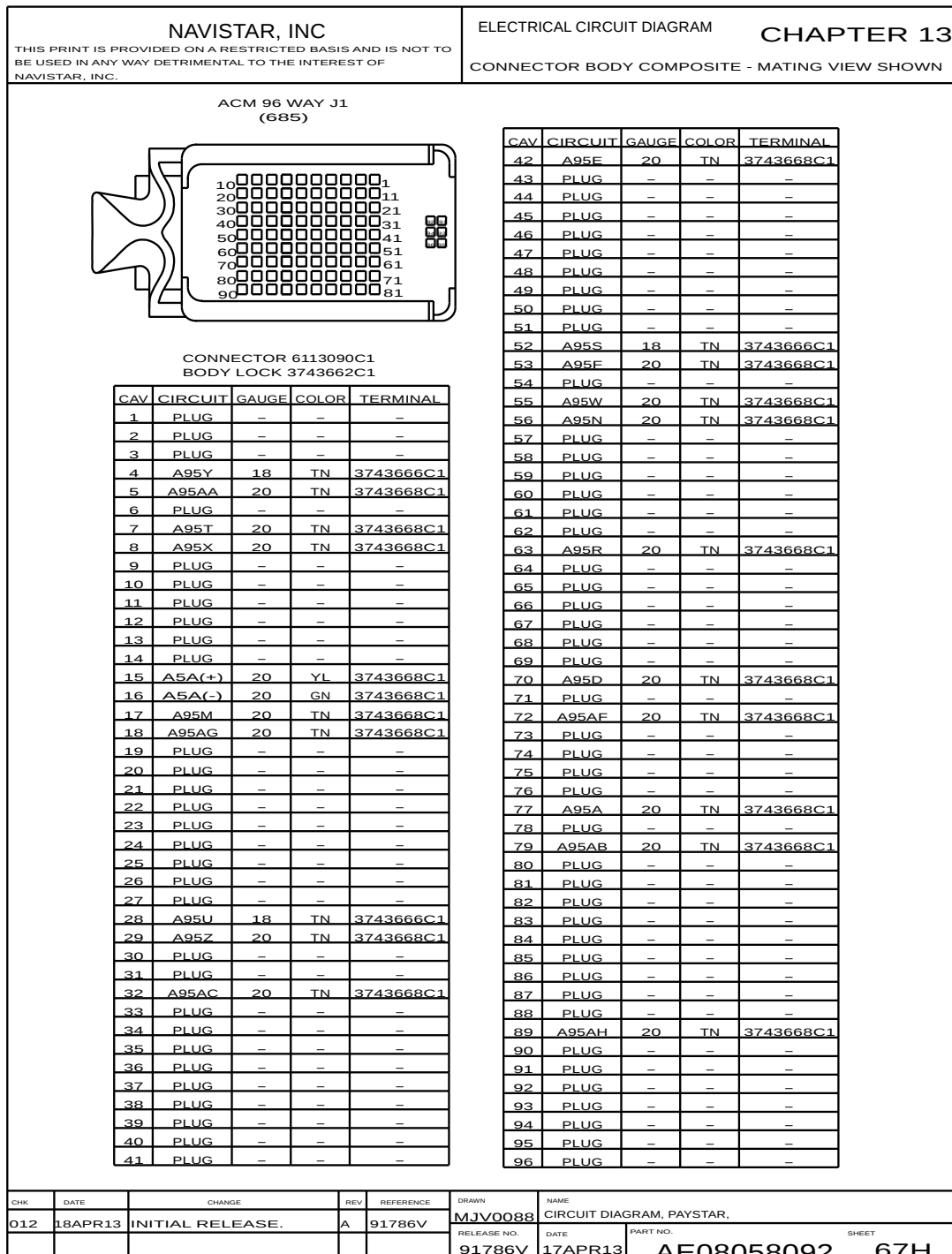


Figure 272 Connector Composites (685)

13.108. CONNECTOR COMPOSITES (1095F / 1097 / 1097F / 1098F), P. 88

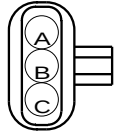
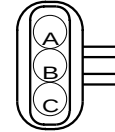
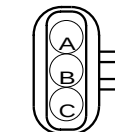
NAVISTAR, INC				ELECTRICAL CIRCUIT DIAGRAM		CHAPTER 13	
THIS PRINT IS PROVIDED ON A RESTRICTED BASIS AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF NAVISTAR, INC.				CONNECTOR BODY COMPOSITE - MATING VIEW SHOWN			
ALLISON DIAG (1095F)							
							
CONNECTOR 1667740C1 BODY LOCK 1667771C1							
CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	SEAL/SLEEVE		
A	K98YL5	18	YL	1667742C1	3568570C1		
B	K98GN5	18	GN	1667742C1	3568570C1		
J1939 BACKBONE (1097)							
							
CONNECTOR 1667741C1 BODY LOCK 1667771C1							
CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	SEAL/SLEEVE		
A*	K98YL1	18	YL	1661875C1	3568570C1		
A#	K5R(+)	18	YL	1661875C1	3568570C1		
B	PLUG	-	-	2025431C1	-		
C*	K98GN1	18	GN	1661875C1	3568570C1		
C#	K5R(-)	18	GN	1661875C1	3568570C1		
* W/ ALLISON XMSN # W/ AUTOSHIFT, ULTRASHIFT & FREEDOMLINE XMSN							
J1939 ENGINE DATALINK (1097F)							
							
CONNECTOR 1667740C1 BODY LOCK 1667771C1							
CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	SEAL/SLEEVE		
A	YL1(+)	18	YL	1667742C1	3568570C1		
B	PLUG	-	-	2025431C1	-		
C	GN1(-)	18	GN	1667742C1	3568570C1		
W/ ABS							
CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	SEAL/SLEEVE		
A	K98YL1	18	YL	1661875C1	3568570C1		
B	PLUG	-	-	2025431C1	-		
C	K98GN1	18	GN	1661875C1	3568570C1		
W/ CUMMINS AHD & ISM W/ CAT C10, C12 & 3406E							
CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	SEAL/SLEEVE		
A	98YL4(+)	18	YL	1661875C1	1661872C1		
B	PLUG	-	-	2025431C1	-		
C	98GN3(-)	18	GN	1661875C1	1661872C1		
W/ CUMMINS N14 DD 60 OR 80 SERIES							
CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	SEAL/SLEEVE		
A	98YL1(+)	18	YL	1667742C1	1661872C1		
B	PLUG	-	-	2025431C1	-		
C	98GN1(-)	18	GN	1667742C1	1661872C1		
J1939 DATALINK (1098F)							
							
CONNECTOR 1667740C1 BODY LOCK 1667771C1							
CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	SEAL/SLEEVE		
A	A98YL1(+)	20	YL	1667742C1	1661872C1		
B	N98SHD1	20	NONE	1667742C1	1661872C1		
C	A98GN1(-)	20	GN	1667742C1	1661872C1		
CHK	DATE	CHANGE	REV	REFERENCE	DRAWN	NAME	
012	17APR13	ADDED R/D 1095F.	B	91786V	300371	CIRCUIT DIAGRAM, PAYSTAR	
					RELEASE NO.	DATE	
					61879Y	17SEP09	
					PART NO.	SHEET	
					AE08058092	088	

Figure 295 Connector Composites (1095F / 1097 / 1097F / 1098F)

13.121. CONNECTOR COMPOSITES (1361 / 1363 / 1364), P. 97

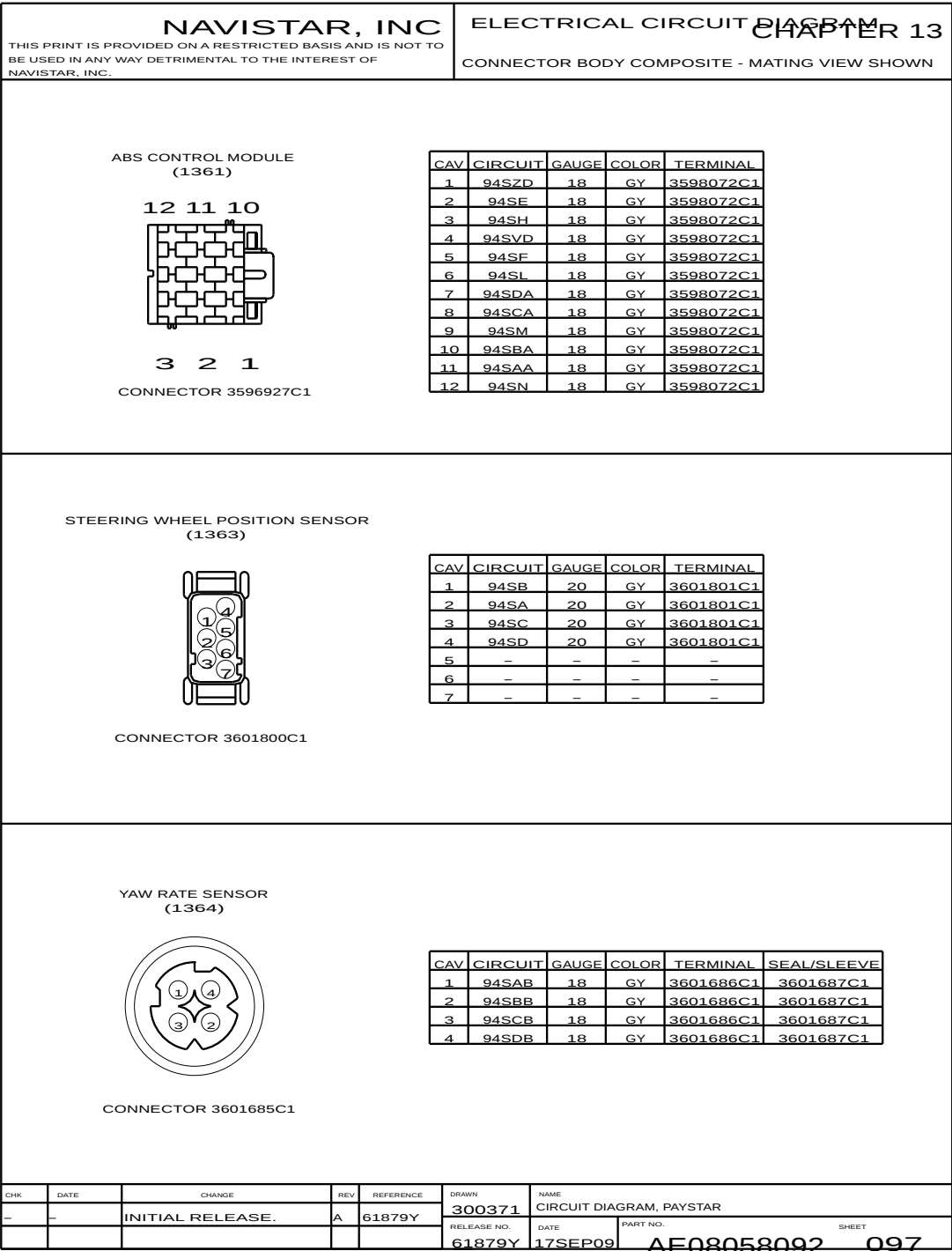


Figure 308 Connector Composites (1361 / 1363 / 1364)

13.144. CONNECTOR COMPOSITES (7211 / 7212 / 7213 / 7250), P. 113

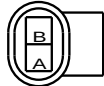
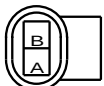
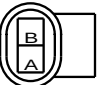
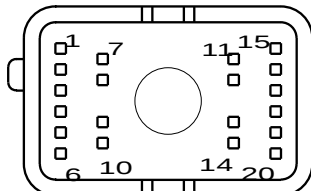
NAVISTAR, INC				ELECTRICAL CIRCUIT DIAGRAM CHAPTER 13																																																																																																																											
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RETARDER TEMPERATURE SOLENOID (7211)  CONNECTOR 3524377C1				<table border="1"><thead><tr><th>CAV</th><th>CIRCUIT</th><th>GAUGE</th><th>COLOR</th><th>TERMINAL</th></tr></thead><tbody><tr><td>A</td><td>K175</td><td>18</td><td>OR</td><td>2036586C1</td></tr><tr><td>B</td><td>K158C</td><td>18</td><td>LTGN</td><td>2036586C1</td></tr></tbody></table>				CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	A	K175	18	OR	2036586C1	B	K158C	18	LTGN	2036586C1																																																																																																									
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B	K158C	18	LTGN	2036586C1																																																																																																																											
RETARDER ACCUMULATOR SOLENOID (7212)  CONNECTOR 3524378C1				<table border="1"><thead><tr><th>CAV</th><th>CIRCUIT</th><th>GAUGE</th><th>COLOR</th><th>TERMINAL</th></tr></thead><tbody><tr><td>A</td><td>K119</td><td>18</td><td>LTBL</td><td>2036586C1</td></tr><tr><td>B</td><td>K131A</td><td>18</td><td>YL</td><td>2036586C1</td></tr></tbody></table>				CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	A	K119	18	LTBL	2036586C1	B	K131A	18	YL	2036586C1																																																																																																									
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B	K131A	18	YL	2036586C1																																																																																																																											
RETARDER SOLENOID (7213)  CONNECTOR 2036584C1				<table border="1"><thead><tr><th>CAV</th><th>CIRCUIT</th><th>GAUGE</th><th>COLOR</th><th>TERMINAL</th></tr></thead><tbody><tr><td>A</td><td>K115</td><td>18</td><td>WH</td><td>2036586C1</td></tr><tr><td>B</td><td>K131B</td><td>18</td><td>YL</td><td>2036586C1</td></tr></tbody></table>				CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	A	K115	18	WH	2036586C1	B	K131B	18	YL	2036586C1																																																																																																									
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B	K131B	18	YL	2036586C1																																																																																																																											
TRANSMISSION BULKHEAD (7250) (LOCATED ON REAR RIGHT ON TRANSMISSION)  CONNECTOR 3605715C1 BODY LOCK 3606532C1				<table border="1"><thead><tr><th>CAV</th><th>CIRCUIT</th><th>GAUGE</th><th>COLOR</th><th>TERMINAL</th></tr></thead><tbody><tr><td>1</td><td>K111</td><td>18</td><td>OR</td><td>3686945C1</td></tr><tr><td>2</td><td>K155</td><td>18</td><td>WH</td><td>3686945C1</td></tr><tr><td>3</td><td>K177</td><td>18</td><td>LTGN</td><td>3686945C1</td></tr><tr><td>4</td><td>K136</td><td>18</td><td>OR</td><td>3686945C1</td></tr><tr><td>5</td><td>K152</td><td>18</td><td>LTGN</td><td>3686945C1</td></tr><tr><td>6</td><td>K171</td><td>18</td><td>YL</td><td>3686945C1</td></tr><tr><td>7@</td><td>K178</td><td>18</td><td>WH</td><td>3686945C1</td></tr><tr><td>8</td><td>K174</td><td>18</td><td>LTBL</td><td>3686945C1</td></tr><tr><td>9</td><td>K133</td><td>18</td><td>YL</td><td>3686945C1</td></tr><tr><td>10</td><td>K151</td><td>18</td><td>WH</td><td>3686945C1</td></tr><tr><td>11#</td><td>K131</td><td>18</td><td>YL</td><td>3686945C1</td></tr><tr><td>11*</td><td>K131C</td><td>18</td><td>YL</td><td>3686945C1</td></tr><tr><td>12</td><td>K137</td><td>18</td><td>WH</td><td>3686945C1</td></tr><tr><td>13</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>14</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>15</td><td>K116</td><td>18</td><td>LTBL</td><td>3686945C1</td></tr><tr><td>16#</td><td>K112</td><td>18</td><td>PK</td><td>3686945C1</td></tr><tr><td>16*</td><td>K112B</td><td>18</td><td>PK</td><td>3686945C1</td></tr><tr><td>17@</td><td>K119</td><td>18</td><td>LTBL</td><td>3686945C1</td></tr><tr><td>18</td><td>K154</td><td>18</td><td>TN</td><td>3686945C1</td></tr><tr><td>19#</td><td>K158</td><td>18</td><td>LTGN</td><td>3686945C1</td></tr><tr><td>19*</td><td>K158B</td><td>18</td><td>LTGN</td><td>3686945C1</td></tr><tr><td>20</td><td>K176</td><td>18</td><td>YL</td><td>3686945C1</td></tr></tbody></table> * W/ RETARDER # N/ RETARDER @ W/ 15L IBB ENGINE				CAV	CIRCUIT	GAUGE	COLOR	TERMINAL	1	K111	18	OR	3686945C1	2	K155	18	WH	3686945C1	3	K177	18	LTGN	3686945C1	4	K136	18	OR	3686945C1	5	K152	18	LTGN	3686945C1	6	K171	18	YL	3686945C1	7@	K178	18	WH	3686945C1	8	K174	18	LTBL	3686945C1	9	K133	18	YL	3686945C1	10	K151	18	WH	3686945C1	11#	K131	18	YL	3686945C1	11*	K131C	18	YL	3686945C1	12	K137	18	WH	3686945C1	13	-	-	-	-	14	-	-	-	-	15	K116	18	LTBL	3686945C1	16#	K112	18	PK	3686945C1	16*	K112B	18	PK	3686945C1	17@	K119	18	LTBL	3686945C1	18	K154	18	TN	3686945C1	19#	K158	18	LTGN	3686945C1	19*	K158B	18	LTGN	3686945C1	20	K176	18	YL	3686945C1
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Figure 331 Connector Composites (7211 / 7212 / 7213 / 7250)