



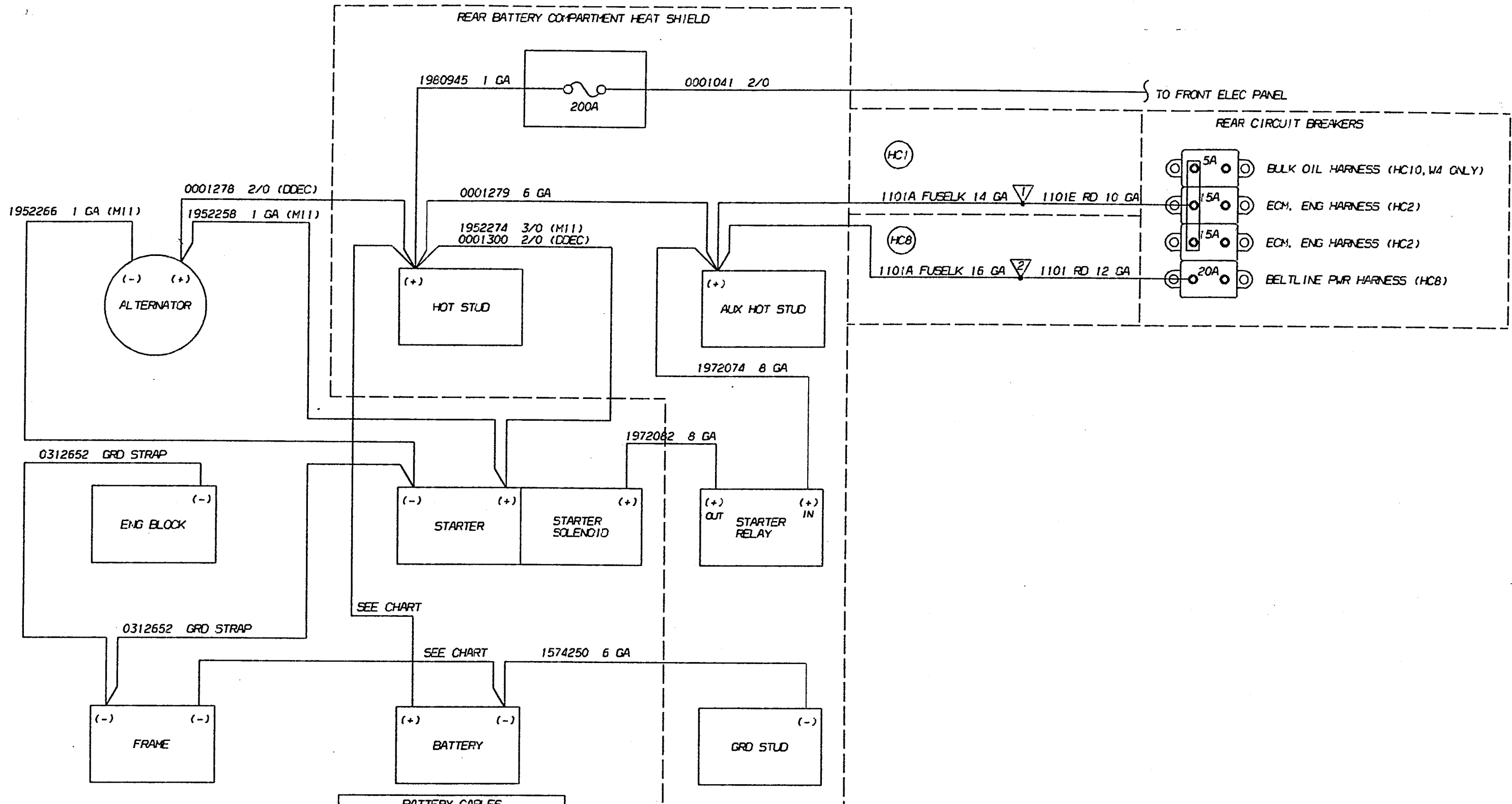
BLUE BIRD

# WANDERLODGE

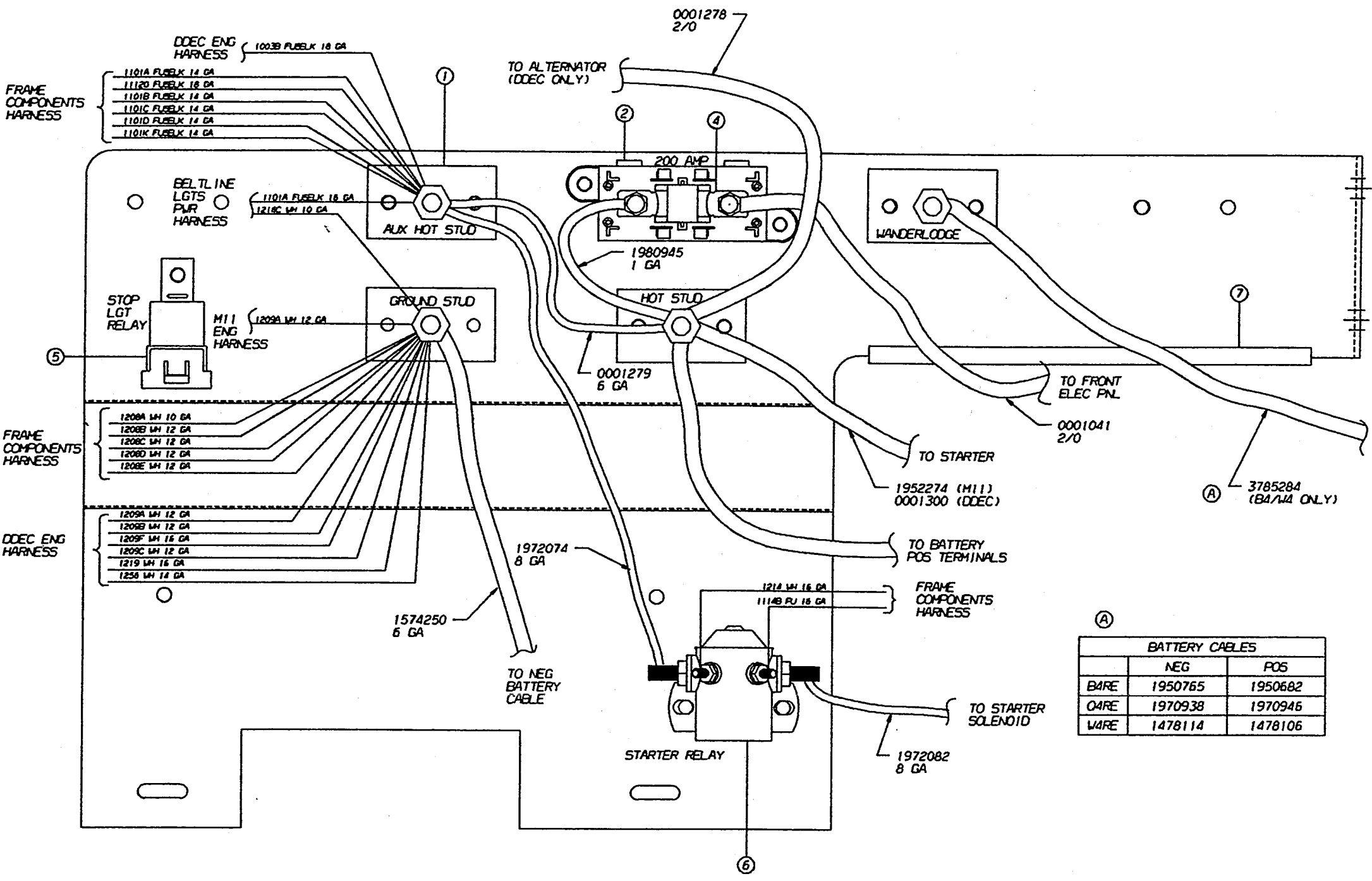


**ELECTRICAL SYSTEM  
BOOKLET #1**

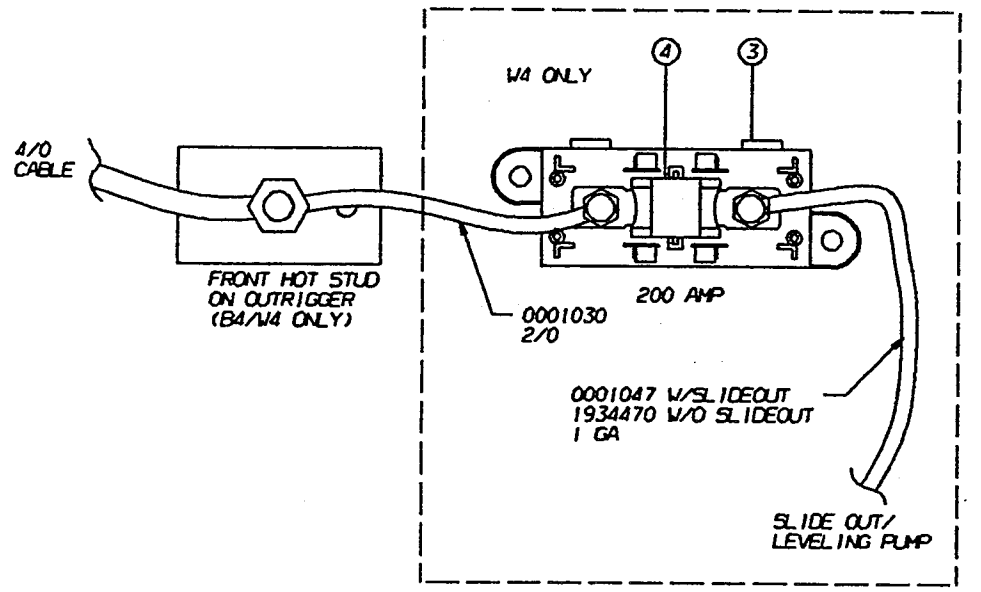
1	0005203	D. WRG. POWER DISTRIBUTION PANEL, REAR RCDA
2	0000030	D. WRG. INSTALLATION HOT STUD REAR RCDA
2A	0003391	D. ELECTRICAL, BATTERY CUTOFF
3	1959790	D. WRG. INTERCONNECTOR RCDA
4	XXXXXX	INTERCONNECT LOCATIONS RCDA
5	1960053	D. INSTRUCTIONS CHASSIS
6	0000633	D. WRG. FRAME COMPONENT
7	0000632	D. WRG. ENGINE CUMMINS M11
8	1965144	D. PROGRAMMING ENGINE ECU M11
9	0000631	D. WRG. ENGINE DDEC
10	0001237	DECAL REAR ELECTRICAL BOX
11	1960715	D. WRG. PANEL ELECTRICAL REAR, RCDA (REAR ELECTRICAL BOX)
12	1995455	D. WRG. STARTER INTERLOCK REAR CONTROL
13	1999861	D. WRG. ECM RETURN DISTRIBUTION DDEC
14	1998004	D. WRG. NEUTRAL DISTRIBUTION DDEC
15	1995448	D. WRG TRANSMISSION NEUTRAL DISTRIBUTION M11
16	1975614	D. WRG. ENGINE BRAKE M11
17	1975606	D. WRG. ENGINE BRAKE CONTROL DDEC
18	1995505	D. WRG. COOLANT FAN CONTROL M11
19	1975580	D/ WRG. COOLANT FAN CONTROL DDEC
20	0015966	D. WRG. LOW COOLANT
21	1975614	D. WRG. CRUISE M11
22	1985787	D. WRG. CRUISE DDEC
23	1995463	D. WRG. PARK BRAKE CONTROL DDEC
24	1991579	D. WRG ENGINE COMPARTMENT LIGHTS



BATTERY CABLES		
	NEG	POS
BARE	1950765	1950682
OARE	1970938	1970946
WARE	1478114	1478106



ITEM	PART NO.	DESCRIPTION	QTY
1.	0553131	TERMINAL, BAT CABLE JUNCTION	5
	0659979	NUT, HEX, FLANGE SER, 1/4-20	10
	2000826	SCREW, MACH, 1/4-20 X 3/4, PH1, TRUSSHD	10
	0882795	LOCKWASHER, SPLIT RING, 3/8, MED	5
	2001451	NUT, HEX HD, 3/8-16	5
2.	1864404	HOLDER, FUSE, MEGA	1
	0977132	CAPSCREW, HEX HD, 1/4-20 X 3/4	2
	1465947	NUT, HEX HD, 1/4-20, LK, NYLON INSERT	2
3.	1864404	HOLDER, FUSE, MEGA	1
	0665727	CAPSCREW, HEX HD, 1/4-28 X 5/8	2
	2001170	LOCKWASHER, SPLIT RING, 1/4	2
	2001402	NUT, HEX HD, 1/4-28	2
4.	1864362	FUSE, MEGA, 200 AMP	2
5.	1779446	RELAY, SPDT, 30A/20A, 12V, W/BACKET	1
	1268119	SCREW, 1/4-20 X 1/2, F, PH1, PAN HD	1
6.	0809103	SWITCH, MAGNETIC, STARTER	1
	2000057	CAPSCREW, HEX HD, 1/4-20 X 1, GR5	2
	2001253	NUT, HEX HD, 8-32	2
	0962761	LOCKWASHER, SPLIT RING, 1/4	2
7.	1278316	TRIM, VINYL, BROWN, DOUBLE LIP	9 INCH

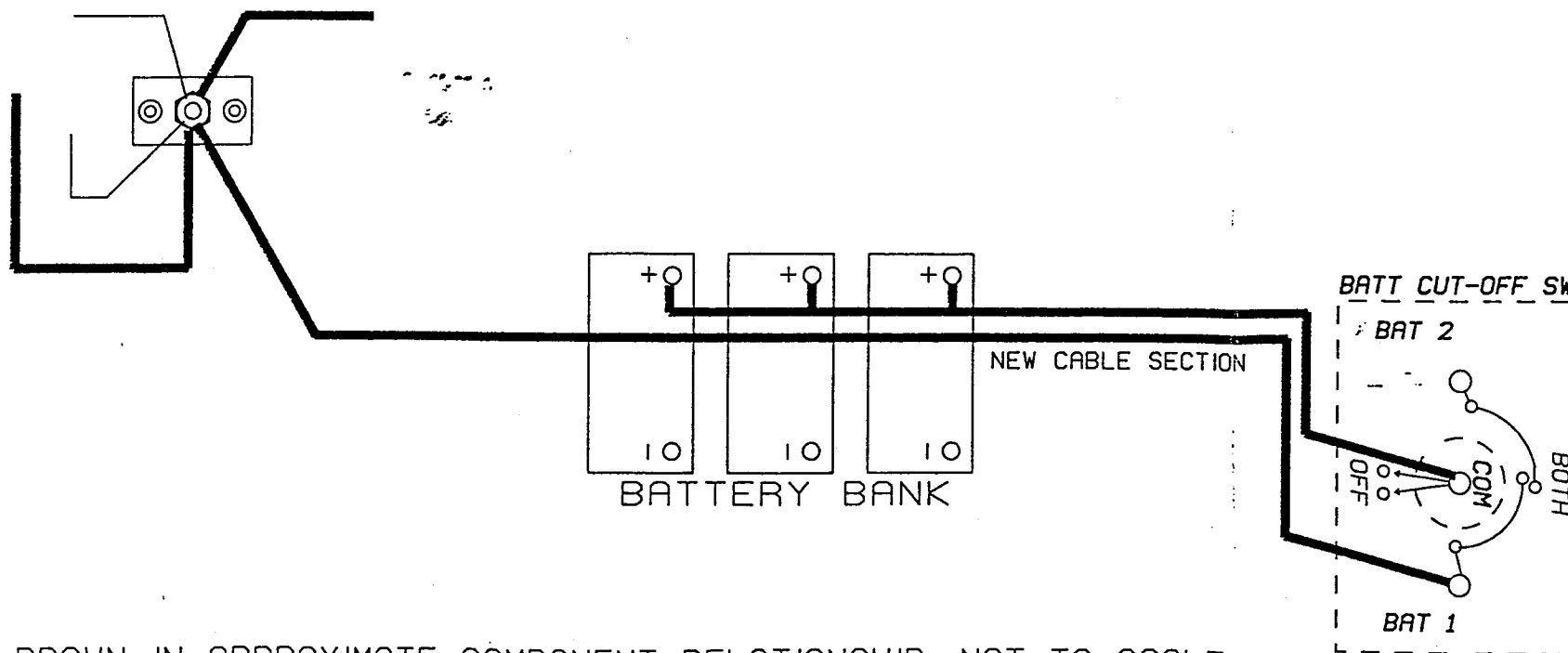


(A)

BATTERY CABLES		
	NEG	POS
BARE	1950765	1950682
OARE	1970938	1970946
WARE	1478114	1478106

**INSTALLATION INSTRUCTIONS**

1. Remove positive battery cable from all three (3) batteries first, then from insulated stud.
2. Using the switch to be installed as a template, locate switch centered twenty inches (20") above compartment floor and eighteen inches (18") outboard of chassis frame with cableway opening down. Mark four (4) places for mounting bolt installation.
3. Drill four 3/16" holes for mounting switch.
4. Apply terminals to each end of cable to be installed from switch to insulated stud.
5. Attach one end of new cable to insulated stud, replacing any other connections that may have been removed previously.
6. Attach the other end of the new cable to the BAT#1 terminal of switch being installed.
7. Attach 'tag' end of existing battery cable to the terminal marked 'COM' on the switch being installed.
8. Apply GLYPTAL to all connection points after checking security.
9. Mount switch to forward compartment wall with specified hardware.
10. Set switch to the 'OFF' position.
11. Reconnect existing battery cable to all three (3) batteries.
12. Apply 3/4" diameter split loom to new cable and route across top of battery bank along existing battery cable's run. Tie-Wrap the two cables together securely approximately every four inches (4") with one tie-wrap on each side of each battery terminal.



DRAWN IN APPROXIMATE COMPONENT RELATIONSHIP...NOT TO SCALE

**INSTALLATION PARTS LIST**

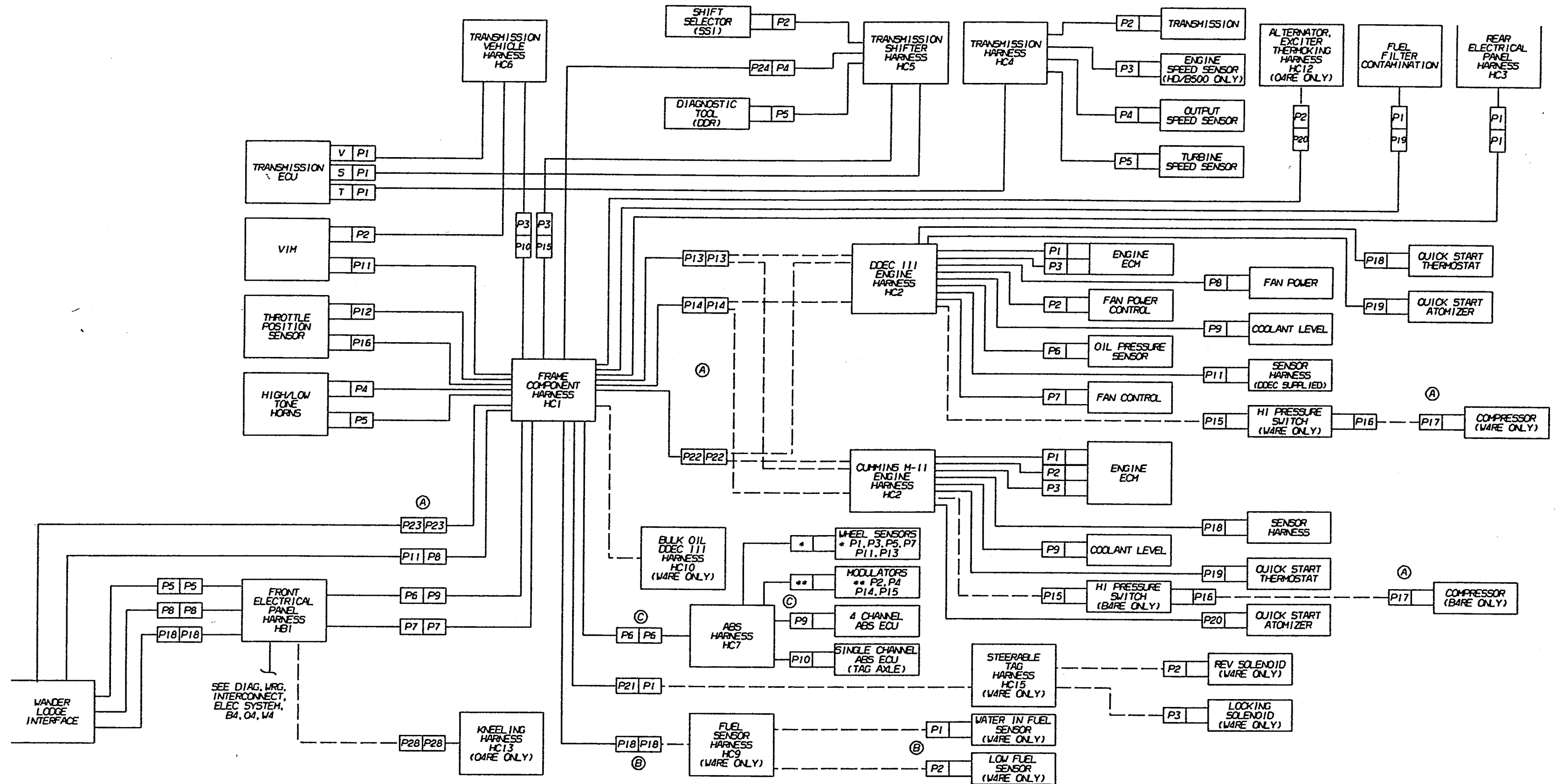
QTY.	PART NUMBER	NOMENCLATURE
1	6052898	SWITCH, BATT. CUTOFF
5	6088488	SCREW, MACHINE, 10-24 X 1.25"
5	2001279	NUT, 10-24
5	3809647	WASHER, LOCK, INTN AND EXT TOOT
10	3840873	WASHER, FLAT, #10
1	4644928	ISOLATOR, RUBBER
2	0557710	CLAMP, LOOP, .687
2	0003389	TERMINAL, 3/8 STUD, TUBULAR
5.5'	0003393	CABLE, 3/0, SAE SGT, RED

**TESTING**

ACTION	RESULT
1. Attempt to start coach. _ _ _ _	Coach will not start. Switch is in 'OFF' position from Step 10 of installation.
2. Rotate switch to position '2'. _ _ Repeat Step 1.	Coach will not start. Nothing is connected to BAT#2 position on switch.
3. Rotate switch to position 'BOTH'. _ Repeat Step 1.	Coach starts.
4. Stop coach.	
5. Rotate switch to position '1'. _ _ _ Repeat Step 1.	Same as Step 3 result.
6. Stop coach. _ _ _ _ _ _ _ _ _ _	Installation and Testing complete.

LET.	REVISIONS	DR.	APP.	CK.	ECN.	SCALE
ECN.	Blue Bird Wanderlodge					SCALE
FORT VALLEY, GEORGIA, U.S.A.						
DIAGRAM, ELECTRICAL, BATTERY CUTOFF, LTC40						
WITH INSTALL. INSTRUCTIONS AND PARTS LIST						
DR.	07/22/98	BY	SGR	SIZE	B 0003391	
App.				BY		
CK.				BY		

TOLERANCE ON ALL DIMENSIONS IS PLUS <input type="text"/>	FINISH	COLOR OR TYPE	MATERIAL:
OR MINUS <input type="text"/> UNLESS OTHERWISE SPECIFIED.	RAW <input type="checkbox"/>	PAINT <input type="checkbox"/>	FLAT SIZE:
INACTIVATES NOS	PRIME <input type="checkbox"/>	PLATING <input type="checkbox"/>	
REPLACED BY NOS	OTHER <input type="checkbox"/>		



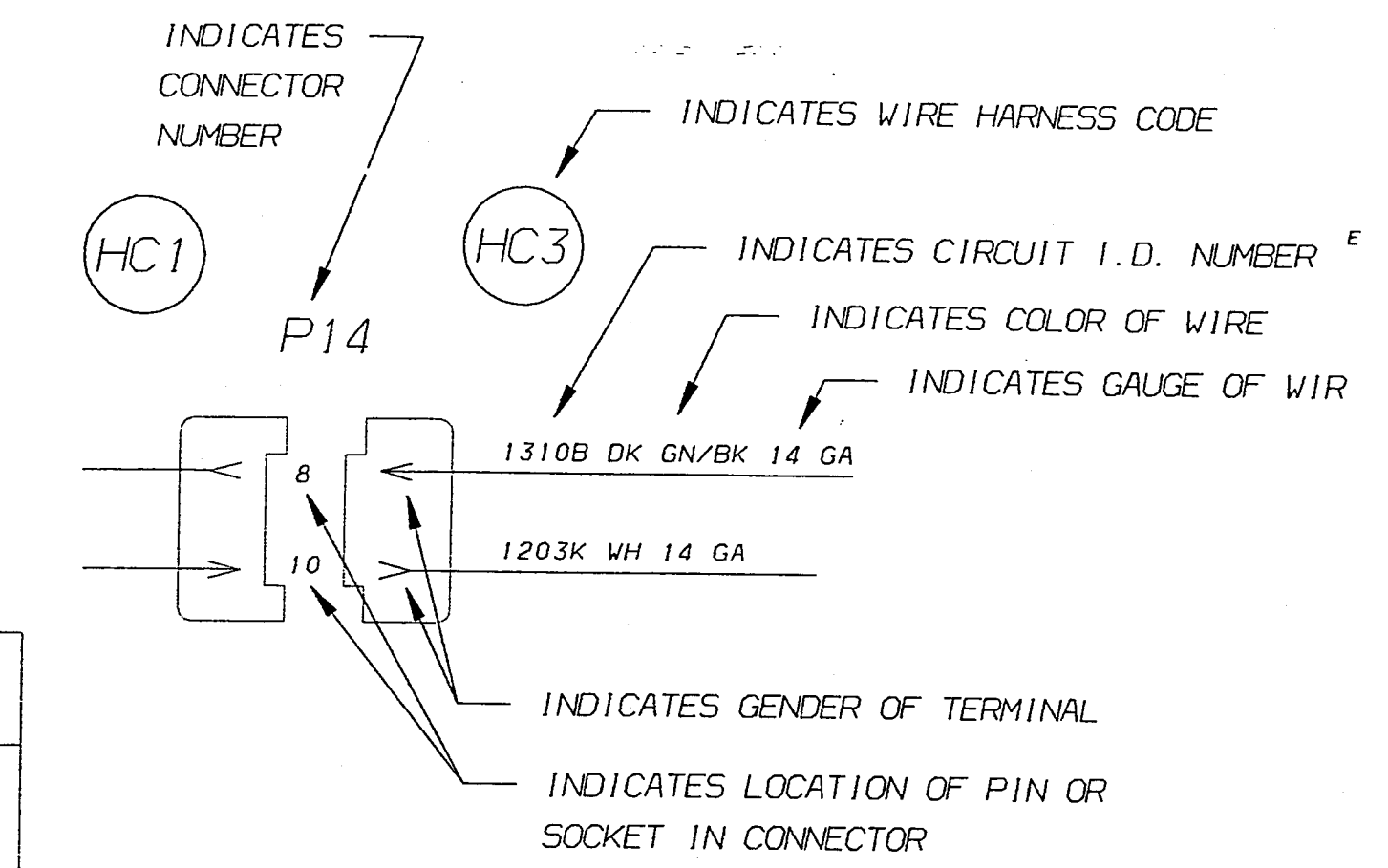
**INTERCONNECT LOCATIONS RCDA**

#	DESCRIPTION	LOCATION
1	P1 TO V TRANS. ECU	DRIVERS LUGGAGE COMPARTMENT
2	P1 TO S TRANS. ECU	DRIVERS LUGGAGE COMPARTMENT
3	P1 TO T TRANS. ECU	DRIVERS LUGGAGE COMPARTMENT
4	P2 TO VIM	DRIVERS LUGGAGE COMPARTMENT
5	P11 TO VIM	DRIVERS LUGGAGE COMPARTMENT
6	P12 TO THROTTLE P. S.	AT THE THROTTLE PEDAL
7	P16 TO THROTTLE P. S.	AT THE THROTTLE PEDAL
8	P13 TO HIGH/LOW HORN	AT FRONT LEFT OUTRIGGER
9	P14 TO HIGH/LOW HORN	AT FRONT LEFT OUTRIGGER
10	P23 TO P23	BEHIND INSTRUMENT PANEL / DIAGNOSTIC CIRCUIT
11	P8 TO P11	BEHIND INSTRUMENT PANEL / INSTRUMENT CIRCUIT
12	P8 TO P8	SIDE ELECTRICAL PANEL
13	P5 TO P5	SIDE ELECTRICAL PANEL
14	P18 TO P18	SIDE ELECTRICAL PANEL
15	P9 TO P6	SIDE ELECTRICAL PANEL
16	P7 TO P7	SIDE ELECTRICAL PANEL
17	P10 TO P3	DRIVERS LUGGAGE COMPARTMENT
18	P15 TO P3	DRIVERS LUGGAGE COMPARTMENT
19	P2 TO SSI	AT THE TRANS. SHIFTER
20	P24 TO P4	CLOSE TO DIAGNOSTIC CONNECTOR / ENG / TRANS INTER.
21	P5 TO DDR	UNDER LEFT SIDE OF DASH / DIAGNOSTIC INTER. FOR CODES
22	HC4 TO P2	ON THE TRANS. BLUE BIRD INTERFACE, LEFT SIDE OF T.
23	HC4 TO P3	ON THE TRANS. LEFT, FRONT, ENG. SPEED SENSOR
24	HC4 TO P4	ON THE TRANS. LEFT, REAR, OUTPUT SPEED SENSOR
25	HC4 TO P5	ON THE TRANS. LEFT, FRONT TURBINE SPEED SENSOR

**INTERCONNECT LOCATIONS RCDA**

#	DESCRIPTION	LOCATION
26	P20 TO P2	AT THE THERMOKING ALTERNATOR
27	P19 TO P1	AT THE FUEL FILTER
28	P1 TO P1	AT THE REAR ELECTRICAL PANEL
29	P13 TO P13	ABOVE TRANSMISSION, ON AN OUTRIGGER, LEFT SIDE
30	P14 TO P14	ABOVE TRANSMISSION, ON AN OUTRIGGER, LEFT SIDE
31	P1 TO ENG. ECM	AT THE ENGINE ECM, SERIES 60
32	P3 TO ENG. ECM	AT THE ENGINE ECM, SERIES 60
33	P2 TO FAN POWER C.	BETWEEN THE HAYDEN COOLER AND THE LEFT FRAME RAIL
34	P6 TO OIL P. SENSOR	AT THE OIL SENSOR, FRONT LEFT OF ENG. SERIES 60
35	P7 TO FAN CONTROL	BETWEEN RADIATOR AND LEFT FRAME
36	P8 TO FAN POWER	BETWEEN RADIATOR AND LEFT FRAME
37	P9 TO COOLANT LEVEL	ON THE DEAERATION TANK
38	P11 TO SENSOR HARN.	AT THE DDEC ECU
39	P18 TO QUICK START T	NOT EQUIPPED
40	P19 TO QUICK START A	NOT EQUIPPED
41	P22 TO P22	ABOVE TRANSMISSION, ON AN OUTRIGGER, LEFT SIDE
42	P1 TO ENG. ECM	AT THE ENGINE ECM M11 CUMMINS
43	P2 TO ENG. ECM	AT THE ENGINE ECM M11 CUMMINS
44	P3 TO ENG. ECM	AT THE ENGINE ECM M11 CUMMINS
45	P9 TO COOLANT LEVEL	ON THE DEAERATION TANK
46	P18 TO SENSOR HARN.	ON THE DEAERATION TANK
47	P19 TO QUICK START T	NOT EQUIPPED
48	P20 TO QUICK START A	AT CONTROL VALVE, ON RIGHT REAR OUTRIGGER
49	P6 TO P3 ABS	FIRST CROSS MEMBER BEHIND FRONT AXLE, LEFT FRAME R.
51	P28 TO P28	DRIVERS LUGGAGE COMPARTMENT
52	P15 TO AC/COMPRESSO	OUTSIDE OF LEFT FRAME RAIL, TO THE REAR OF RADIATOR

CHASSIS			
HARNESS CODE	PART-NO	-----DESCRIPTION-----	
HC1	0000089	HARNESS, WRG, FRAME COMPONENT, HC1	RCDA
HC2	0000011	HARNESS, WRG, ENGINE, CUMMINS, M11, HC2	RCDA
HC2	0000088	HARNESS, WRG, ENGINE, DDEC 111, HC2	RCDA
HC3	1950831	HARNESS, WRG, PANEL, ELECTRICAL, REAR, HC3	RCDA
HC4	1989540	HARNESS, WRG, TRANSMISSION, HD 4060	RCDA
HC5	1989557	HARNESS, WRG, TRANSMISSION SHIFTER	RCDA
HC6	1989565	HARNESS, WRG, TRANSMISSION VEHICLE	RCDA
HC7	1743723	HARNESS, WRG, ABS	RCDA
HC8	0012021	HARNESS, WRG, BELTLINE LIGHTS POWER, HC8	RCDA
HC9	0005727	HARNESS, WRG, FUEL SENSORS, HC9	WARE
HC10	1954122	HARNESS, WRG, BULK OIL	RCDA
<del>HC11</del>	<del>1995604</del>	<del>HARNESS, WRG, DIAGNOSTIC</del>	<del>RCDA</del>
HC12	0010538	HARNESS, WRG, ALT, EXCITER, T/K, FEA 3810201	RCDA
HC13	0016014	HARNESS, WRG, KNEELING, CHASSIS, HC13	RCDA
<del>HC14</del>	<del>1973841</del>	<del>HARNESS, WRG, PRESSURE SWITCH</del>	<del>WARE4300</del>
HC15	0012104	HARNESS, WRG, STEERABLE TAG	WARE

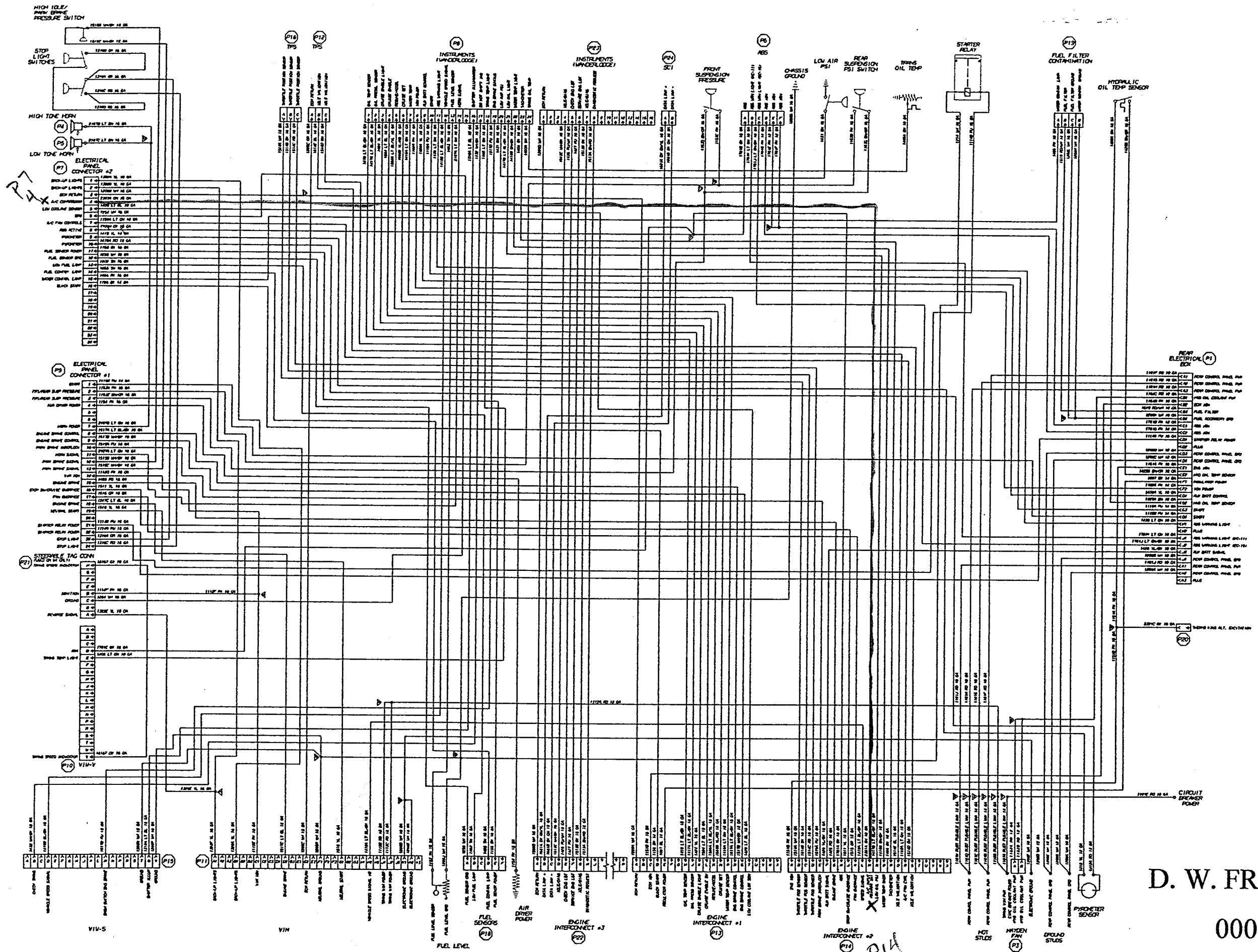


(C)  
(C)  
(C)  
(E)  
(C)  
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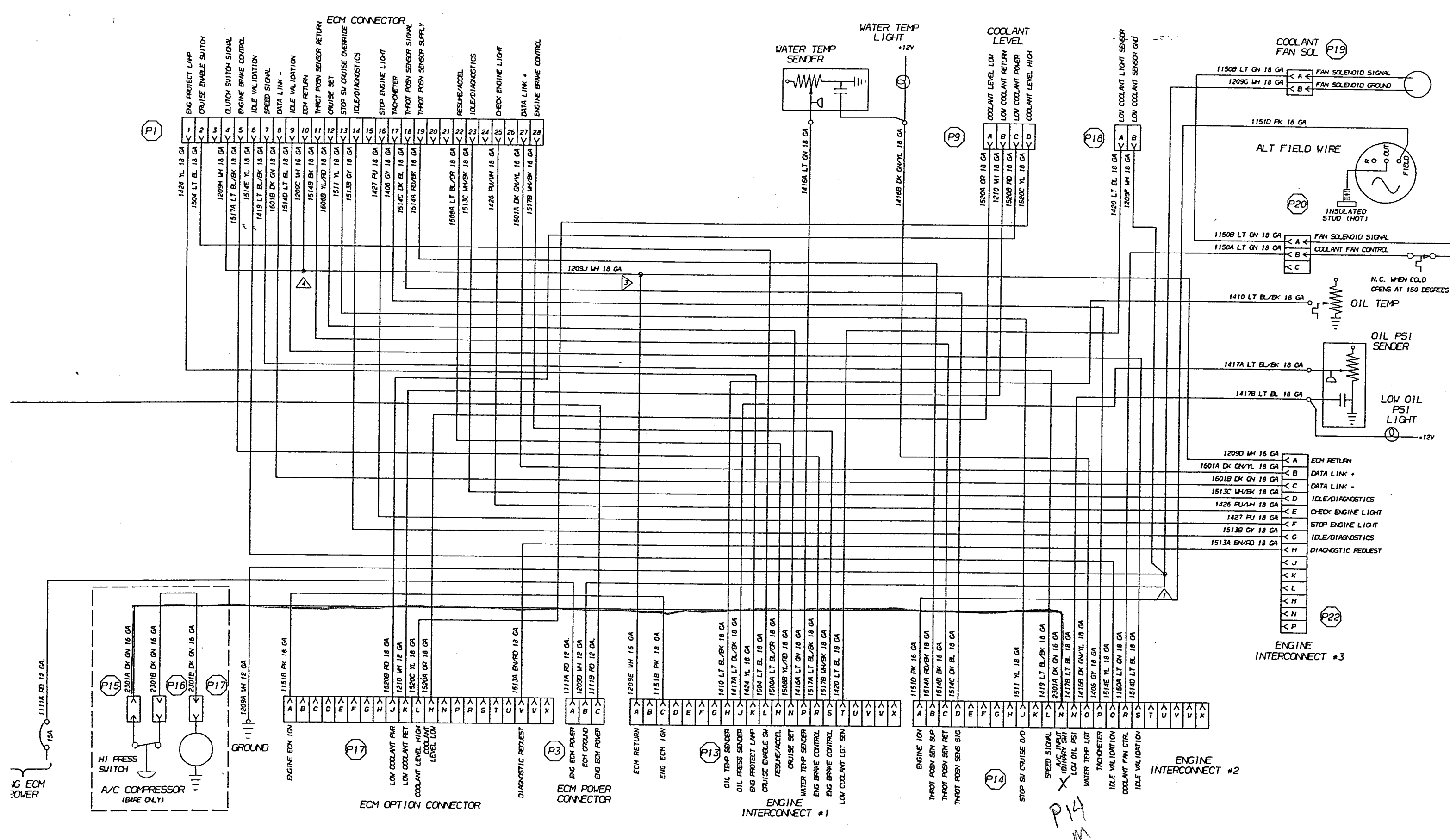
DIAGRAM INSTRUCTIONS CHASSIS

1960053#2





D. W. FRAME COMP.  
0000633M



D. WRG. ENGINE CUMMINS M11 0000632

CELECT PLUS PROGRAMING M11 - B4RE98

CELECT PLUS FEATURE/PARAMETER	DEFAULT	SELECTION
<b>(FEATURES 1)</b>		
<b>(FEATURES 2)</b>		
1. MAINTENANCE MONITOR	NO	YES
2. DISABLE FAN ACCESSORY SWITCH	NO	YES
3. AUTOMATIC TRANSMISSION	NO	YES
4. ENGINE BRAKE / MPH INTERACTION	NO	YES
5. ON-HIGHWAY APPLICATION	NO	YES
<b>(VEHICLE SETUP)</b>		
1. MAGNETIC PICKUP VSS	NO	YES
2. REAR AXLE RATIO	3.73	4.44
3. TOP TRANSMISSION RATIO	0.74	0.64
4. ONE GEAR DOWN RATIO	1.0	0.74
5. TIRE REVS/MILE (12R22.5)	501	487
<b>(VEHICLE PERFORMANCE 1)</b>		
1. MAX SPEED / TOP GEAR	65MPH	85MPH
<b>(VEHICLE PERFORMANCE 2)</b>		
1. MIN SPEED / ENGINE BRAKE ENGAGEMENT	25MPH	30MPH
<b>(PTO OPTIONS)</b>		
MAX PTO SPEED (RPM)	900	1600
MIN PTO SPEED (RPM)	600	850
<b>(CRUISE CONTROL 1)</b>		
1. MAX CRUISE CONTROL SPEED	65MPH	85MPH
2. SET/ACCEL & RESUME/COAST	NO	YES
<b>(MAINTENANCE MONITOR)</b>		
1. OPERATING MODE	AUTO	DISTANCE
2. DISTANCE	12,000MI	7,000MI
<b>(VEHICLE INFO 1)</b>		
1. OEM NAME		BBIRD
2. OEM VEHICLE		B4RE
3. VEHICLE ID NUMBER (VIN)		(CHECK VEHICLE)
4. MODEL YEAR		1998

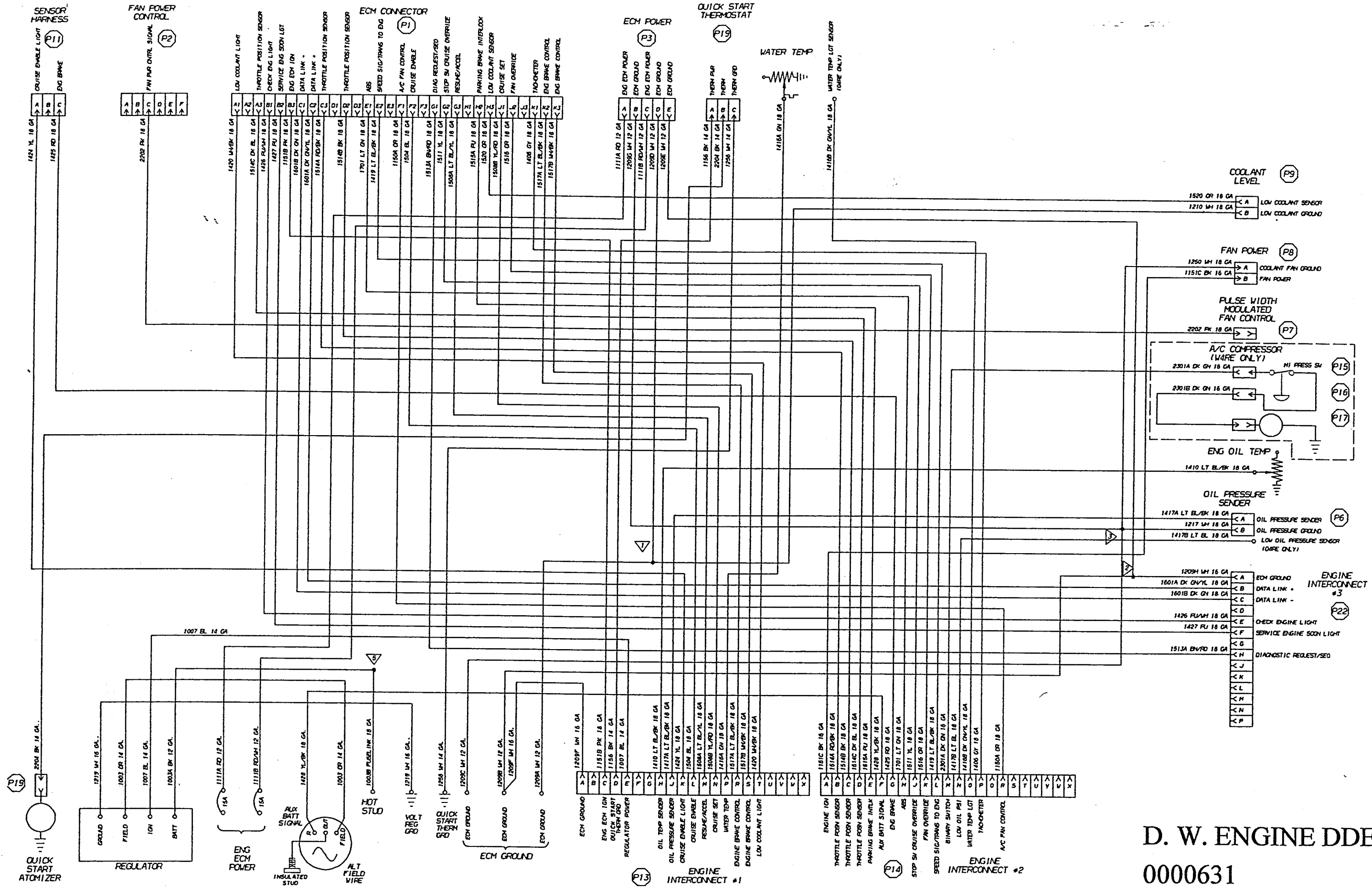
CELECT PLUS PROGRAMING M11 - 04RE98  
(12R22.5 TIRES)

CELECT PLUS FEATURE/PARAMETER	DEFAULT	SELECTION
<b>(FEATURES 1)</b>		
<b>(FEATURES 2)</b>		
1. MAINTENANCE MONITOR	NO	YES
2. DISABLE FAN ACCESSORY SWITCH	NO	YES
3. AUTOMATIC TRANSMISSION	NO	YES
4. ENGINE BRAKE / MPH INTERACTION	NO	YES
5. ON-HIGHWAY APPLICATION	NO	YES
<b>(VEHICLE SETUP)</b>		
1. MAGNETIC PICKUP VSS	NO	YES
2. REAR AXLE RATIO	3.73	4.44
3. TOP TRANSMISSION RATIO	0.74	0.64
4. ONE GEAR DOWN RATIO	1.0	0.74
5. TIRE REVS/MILE (12R22.5)	501	487
<b>(VEHICLE PERFORMANCE 1)</b>		
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<b>(PTO OPTIONS)</b>		
MAX PTO SPEED (RPM)	900	1600
MIN PTO SPEED (RPM)	600	850
<b>(CRUISE CONTROL 1)</b>		
1. MAX CRUISE CONTROL SPEED	65MPH	85MPH
2. SET/ACCEL & RESUME/COAST	NO	YES
<b>(MAINTENANCE MONITOR)</b>		
1. OPERATING MODE	AUTO	DISTANCE
2. DISTANCE	12,000MI	18,000MI
<b>(VEHICLE INFO 1)</b>		
1. OEM NAME		BBIRD
2. OEM VEHICLE		04RE
3. VEHICLE ID NUMBER (VIN)		(CHECK VEHICLE)
4. MODEL YEAR		1998

CELECT PLUS PROGRAMING M11 - 04RE98  
(11R22.5 TIRES)

CELECT PLUS FEATURE/PARAMETER	DEFAULT	SELECTION
<b>(FEATURES 1)</b>		
<b>(FEATURES 2)</b>		
1. MAINTENANCE MONITOR	NO	YES
2. DISABLE FAN ACCESSORY SWITCH	NO	YES
3. AUTOMATIC TRANSMISSION	NO	YES
4. ENGINE BRAKE / MPH INTERACTION	NO	YES
5. ON-HIGHWAY APPLICATION	NO	YES
<b>(VEHICLE SETUP)</b>		
1. MAGNETIC PICKUP VSS	NO	YES
2. REAR AXLE RATIO	3.73	4.44
3. TOP TRANSMISSION RATIO	0.74	0.64
4. ONE GEAR DOWN RATIO	1.0	0.74
5. TIRE REVS/MILE (11R22.5)	501	500
<b>(VEHICLE PERFORMANCE 1)</b>		
1. MAX SPEED / TOP GEAR	65MPH	85MPH
<b>(VEHICLE PERFORMANCE 2)</b>		
1. MIN SPEED / ENGINE BRAKE ENGAGEMENT	25MPH	30MPH
<b>(PTO OPTIONS)</b>		
MAX PTO SPEED (RPM)	900	1600
MIN PTO SPEED	600	850
<b>(CRUISE CONTROL 1)</b>		
1. MAX CRUISE CONTROL SPEED	65MPH	85MPH
2. SET/ACCEL & RESUME/COAST	NO	YES
<b>(MAINTENANCE MONITOR)</b>		
1. OPERATING MODE	AUTO	DISTANCE
2. DISTANCE	12,000MI	18,000MI
<b>(VEHICLE INFO 1)</b>		
1. OEM NAME		BBIRD
2. OEM VEHICLE		04RE
3. VEHICLE ID NUMBER (VIN)		(CHECK VEHICLE)
4. MODEL YEAR		1998

NOTE:  
ALL OF THE ABOVE INFORMATION IS EITHER USER INPUT OR VARIATIONS FROM THE ECU DEFAULT VALUES; ONLY THE ABOVE INFORMATION NEEDS TO BE CHANGED. DO NOT CHANGE ANY OTHER DEFAULT VALUES - THEY WILL BE ACCEPTED AS-IS.



D. W. ENGINE DDEC  
0000631

MICRO  
RELAYS

<p>IGNITION DROP OUT</p>	<p>ABS MC-11 POWER</p>	<p>ABS EC-15 POWER</p>	
<p>FUEL FILTER</p>	<p>ENGINE ECM IGNITION</p>	<p>ABS EC-15 POWER</p>	
<p>ENGINE ECM IGNITION 5 A</p>			
<p>ABS EC-15 30 A</p>	<p>ABS MC-11 15 A</p>	<p>FUEL FILTER 20 A</p>	
<p>HAYDEN FAN 25 A</p>	<p>IGNITION 10 A</p>	<p>REG POWER 20 A</p>	<p>ENGINE IGN 15 A</p>
		<p>ABS EC-15 WARNING LIGHT</p>	
<p>IGNITION</p>	<p>AUX BATT</p>	<p>ABS MC-11 WARNING LIGHT</p>	
<p>HAYDEN FAN</p>	<p>REGULATOR POWER</p>		

RELAYS

DECAL REAR ELECTRICAL BOX /  
PANEL 0001237M

BUSSED BATTERY POWER

FUEL FILTER RELAY

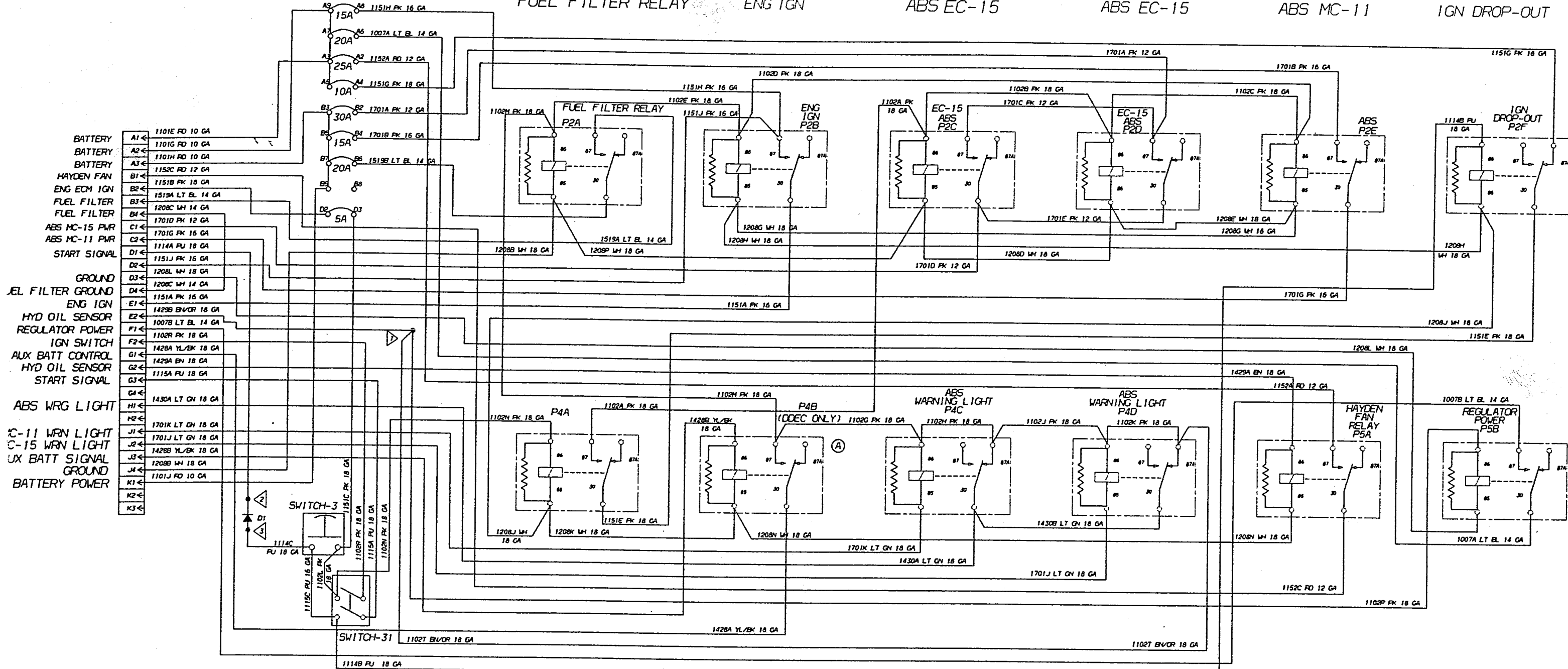
ENG IGN

ABS EC-15

ABS EC-15

ABS MC-11

IGN DROP-OUT



IGN RELAY

AUX BATT

ABS WARNING LIGHT

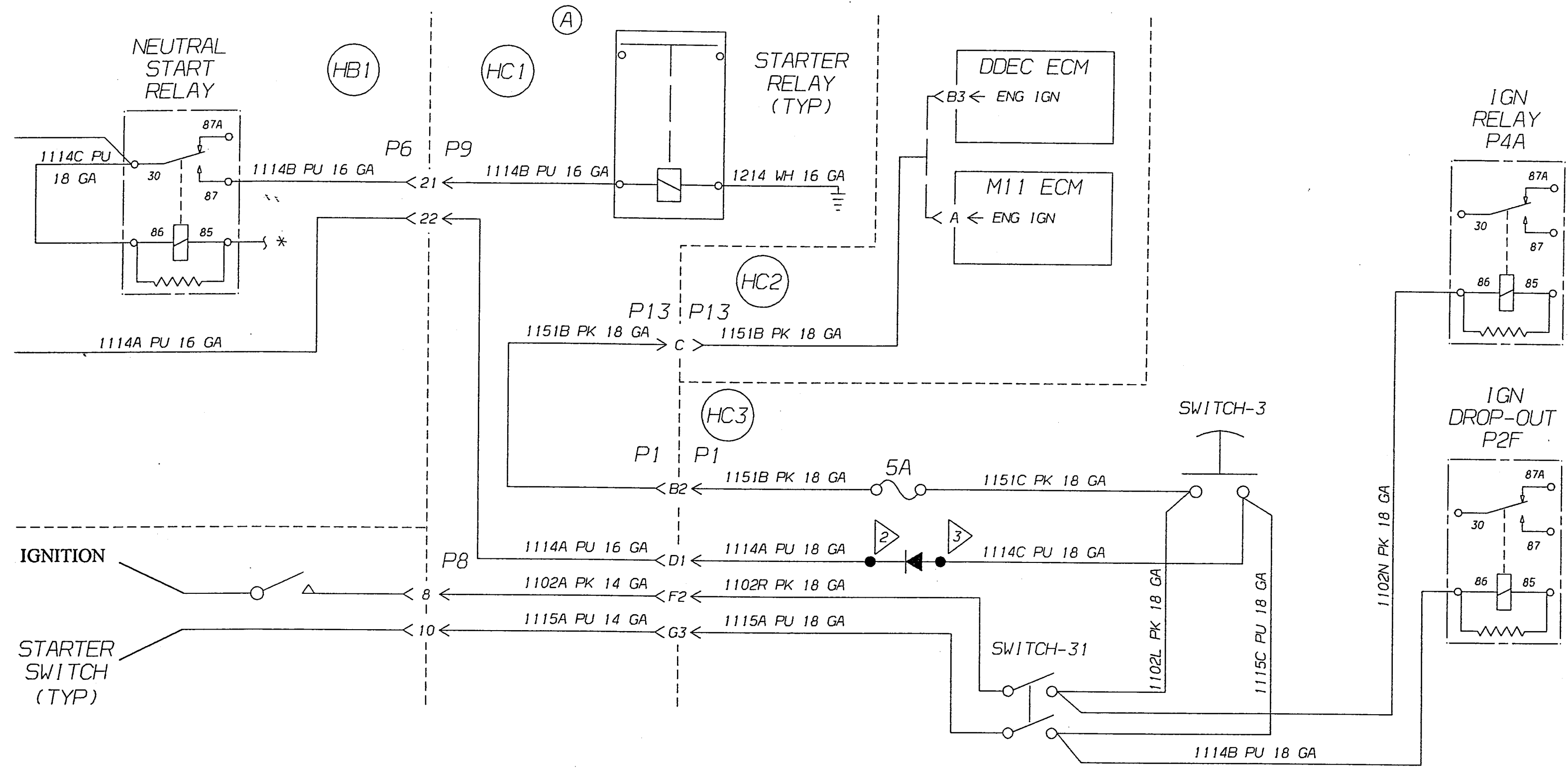
ABS WARNING LIGHT

HAYDEN FAN RELAY

REGULATOR POWER

D. WRG. PANEL ELECTRICAL REAR HC3 RCDA

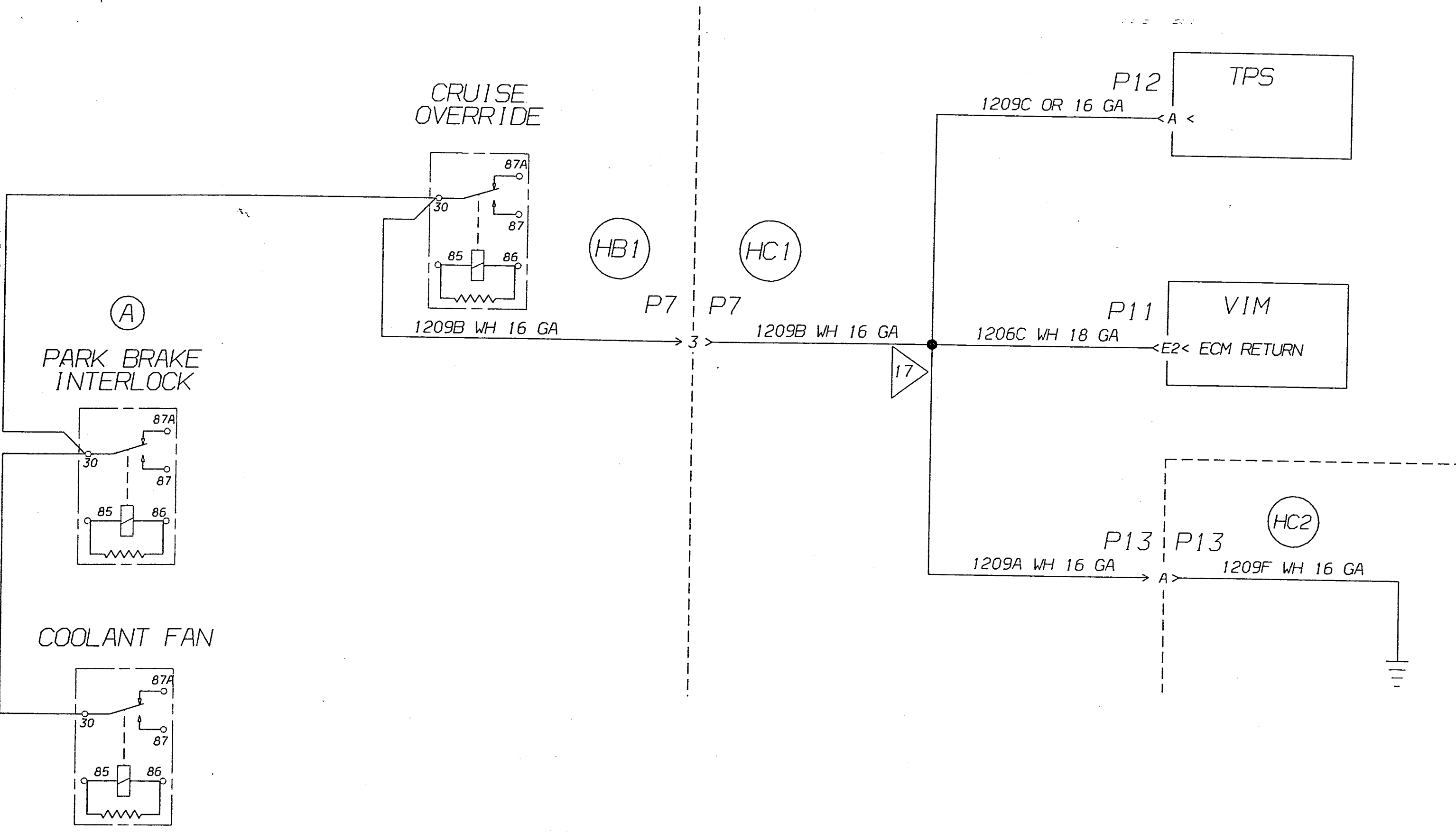
1960715M



WANDERLODGE

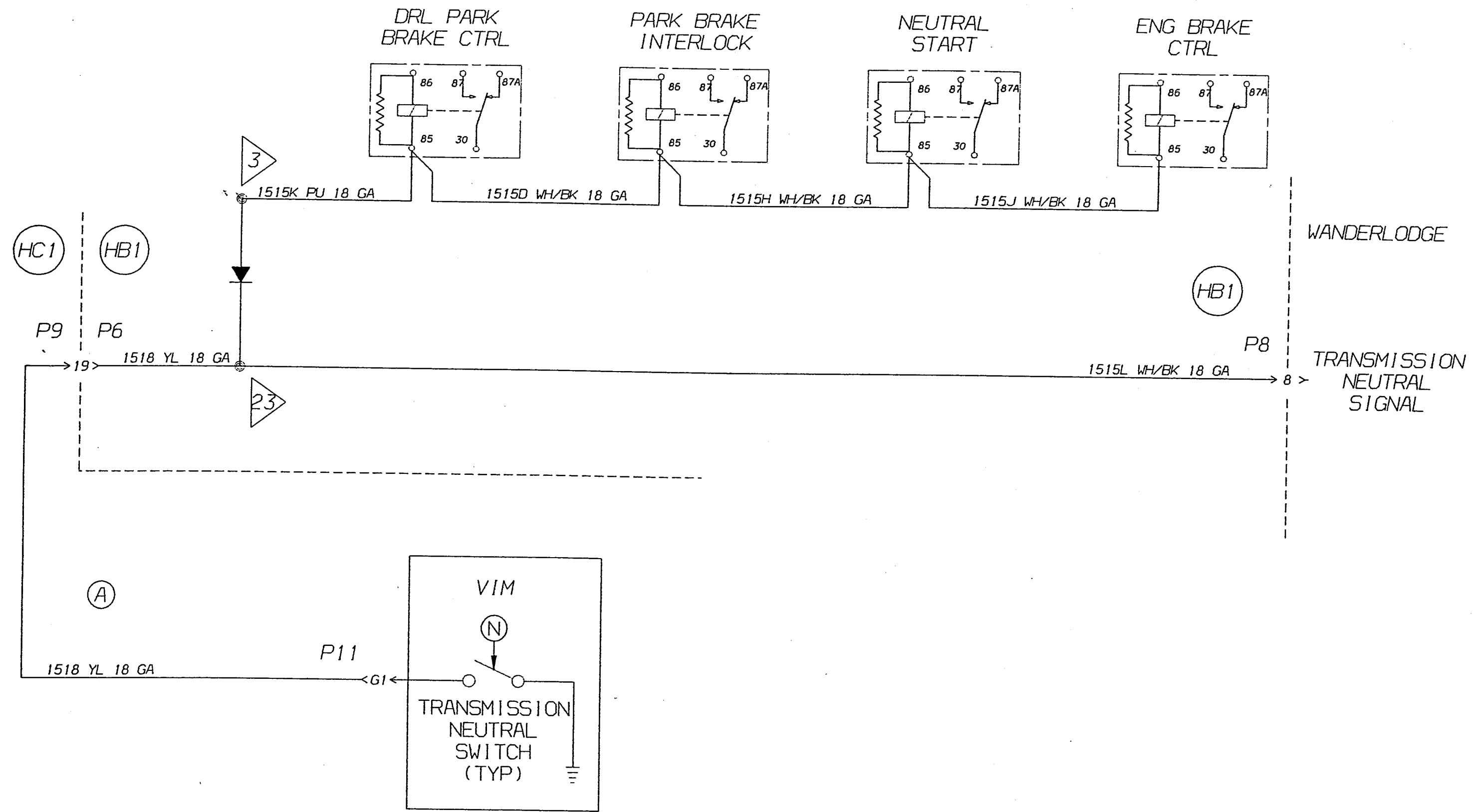
\* SEE DIAGRAM, WRG, TRANS NEUTRAL DISTRIBUTION

D. W. STARTER INTERLOCK REAR CTRL 1995455 REV.A

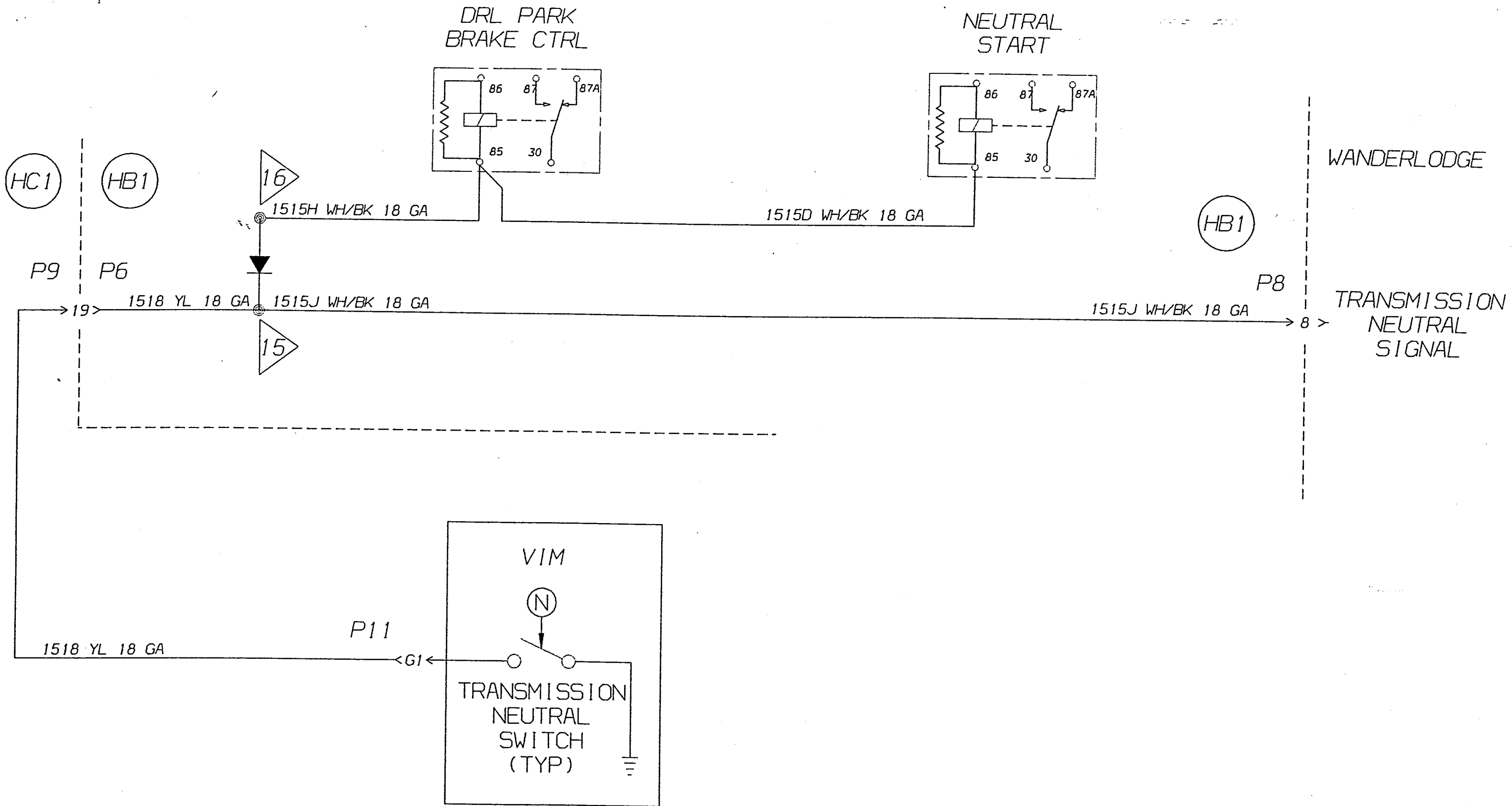


D. W. ECM RETURN DIST. DDEC 1999861 REV.

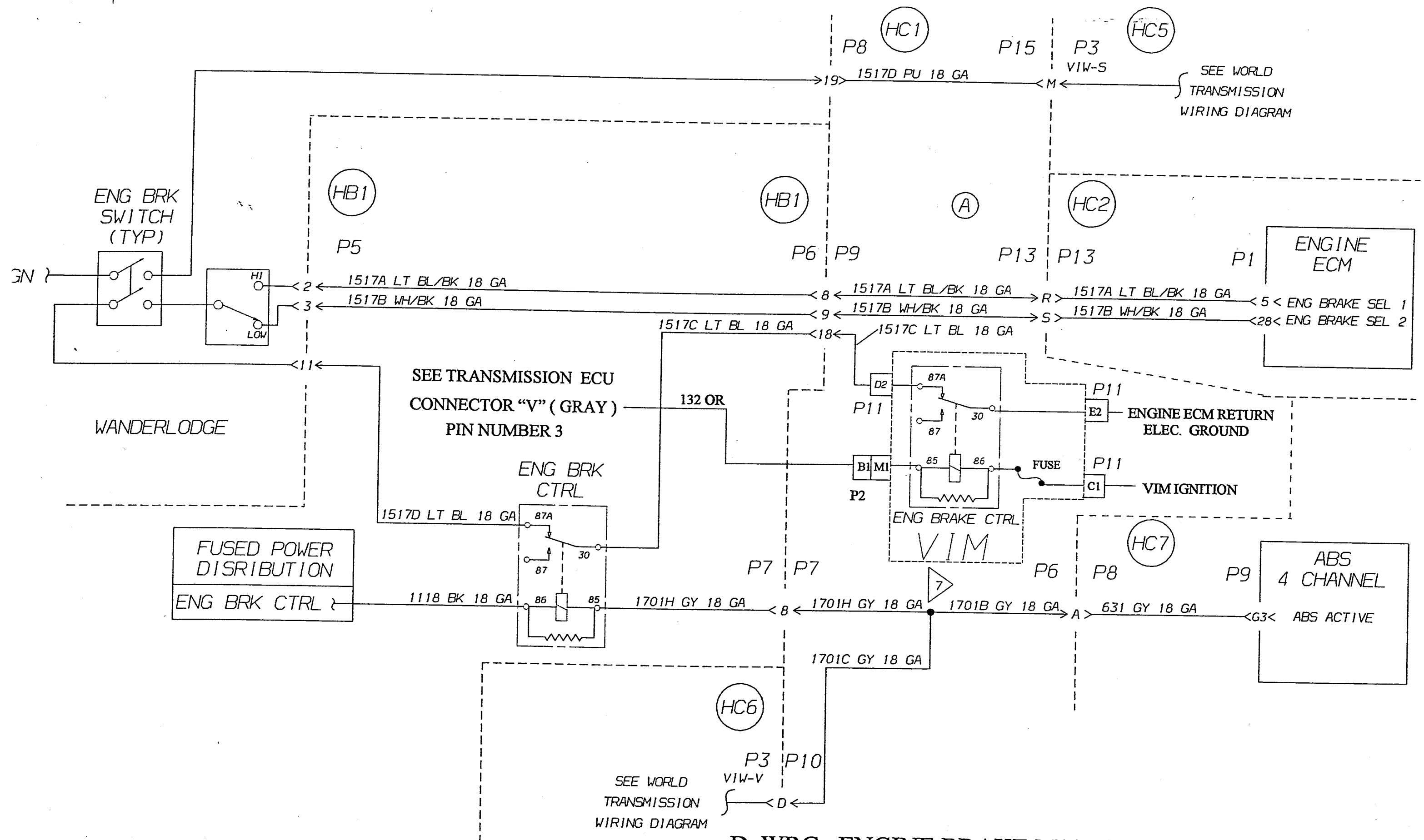




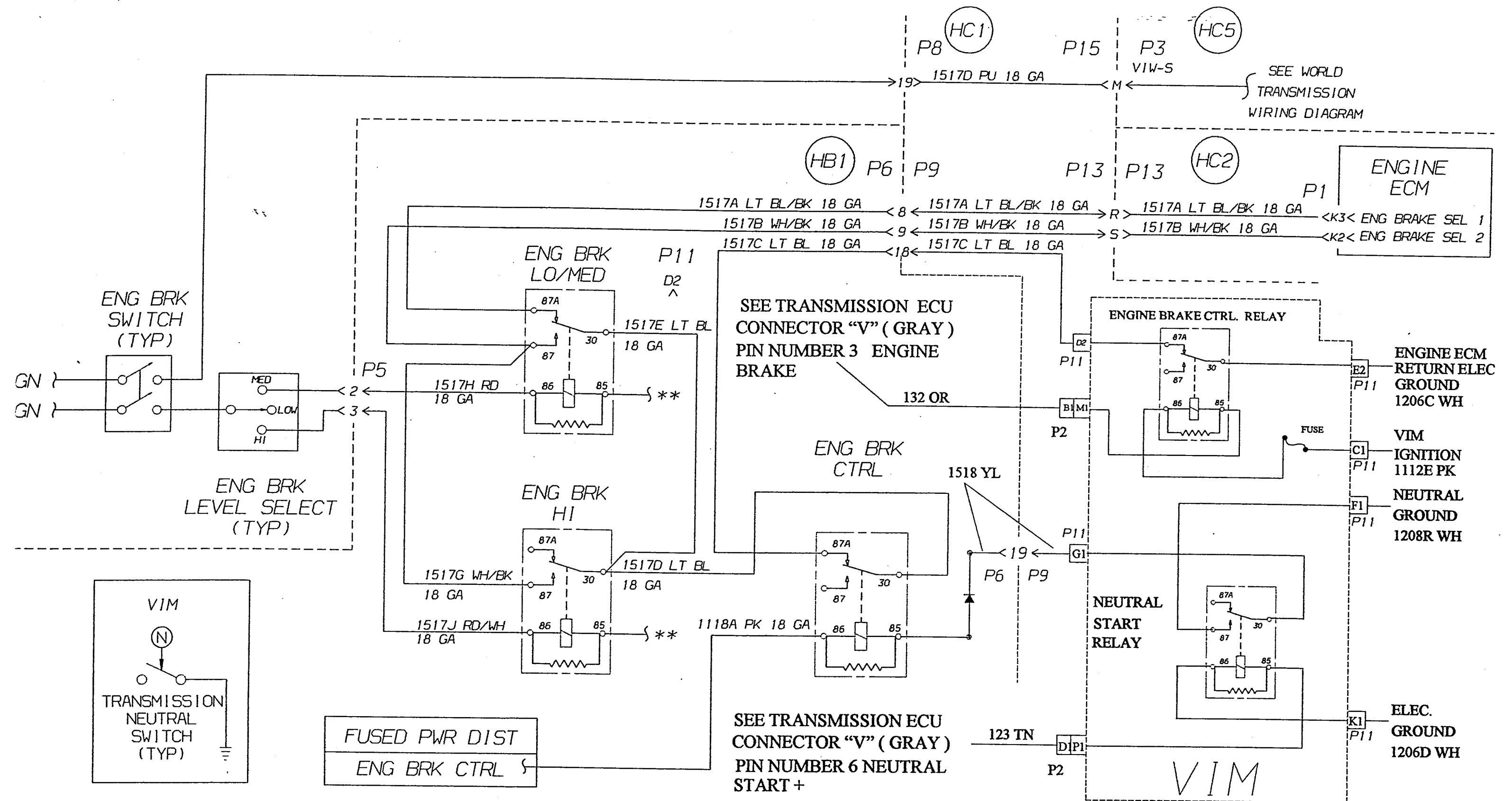
D. W. NEUTRAL DIST. DDEC 1998004 REV. 4



D. W. TRANSMISSION NEUTRAL DIST. M11 1995448 REV.A



D. WRG. ENGINE BRAKE M11 1975614M REV. A

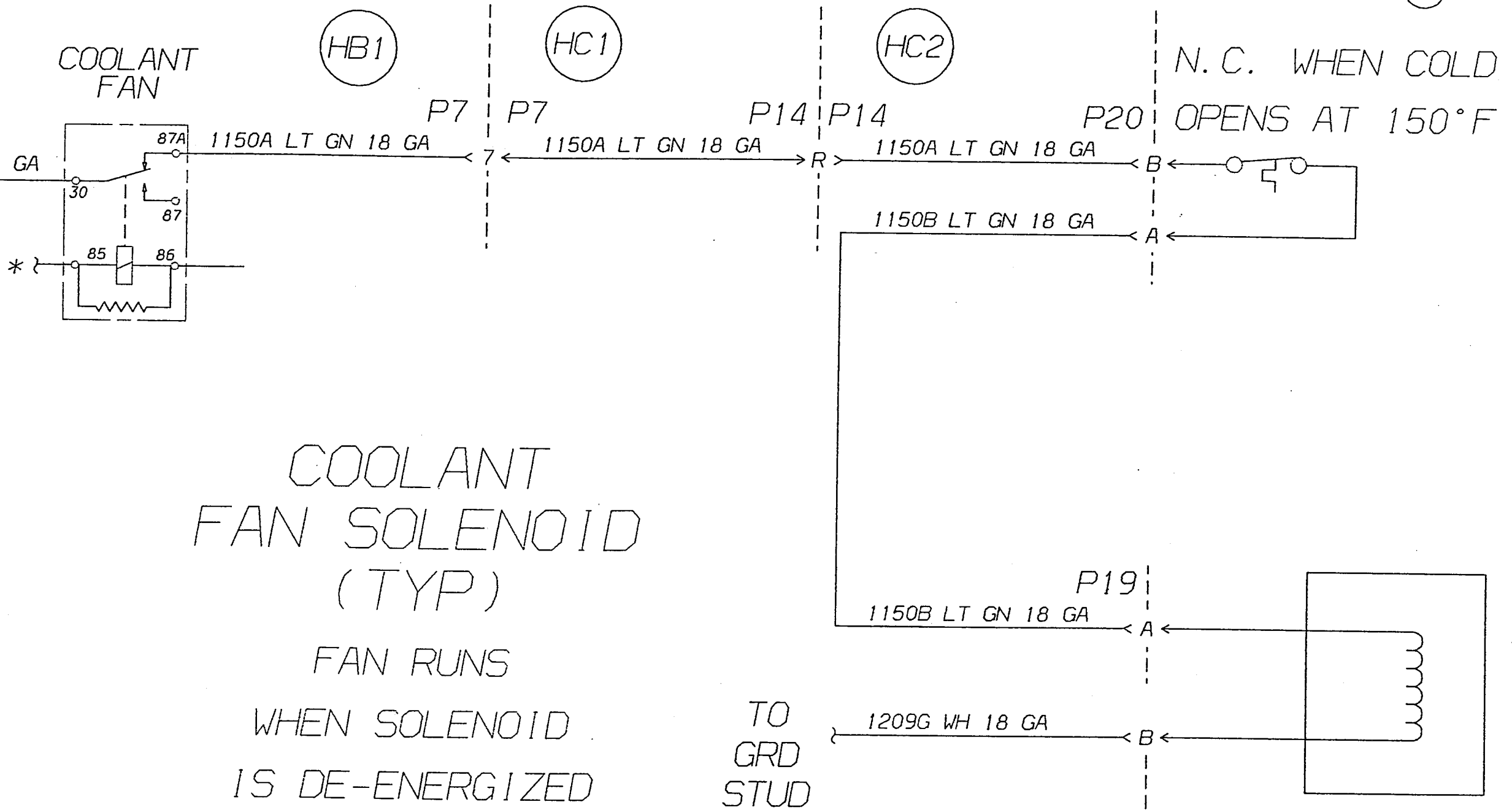


\*\* SEE DIAGRAM, WRG, GRD DIST

### D.WRG. ENGINE BRAKE CONTROL DDEC 1975606M REV.A

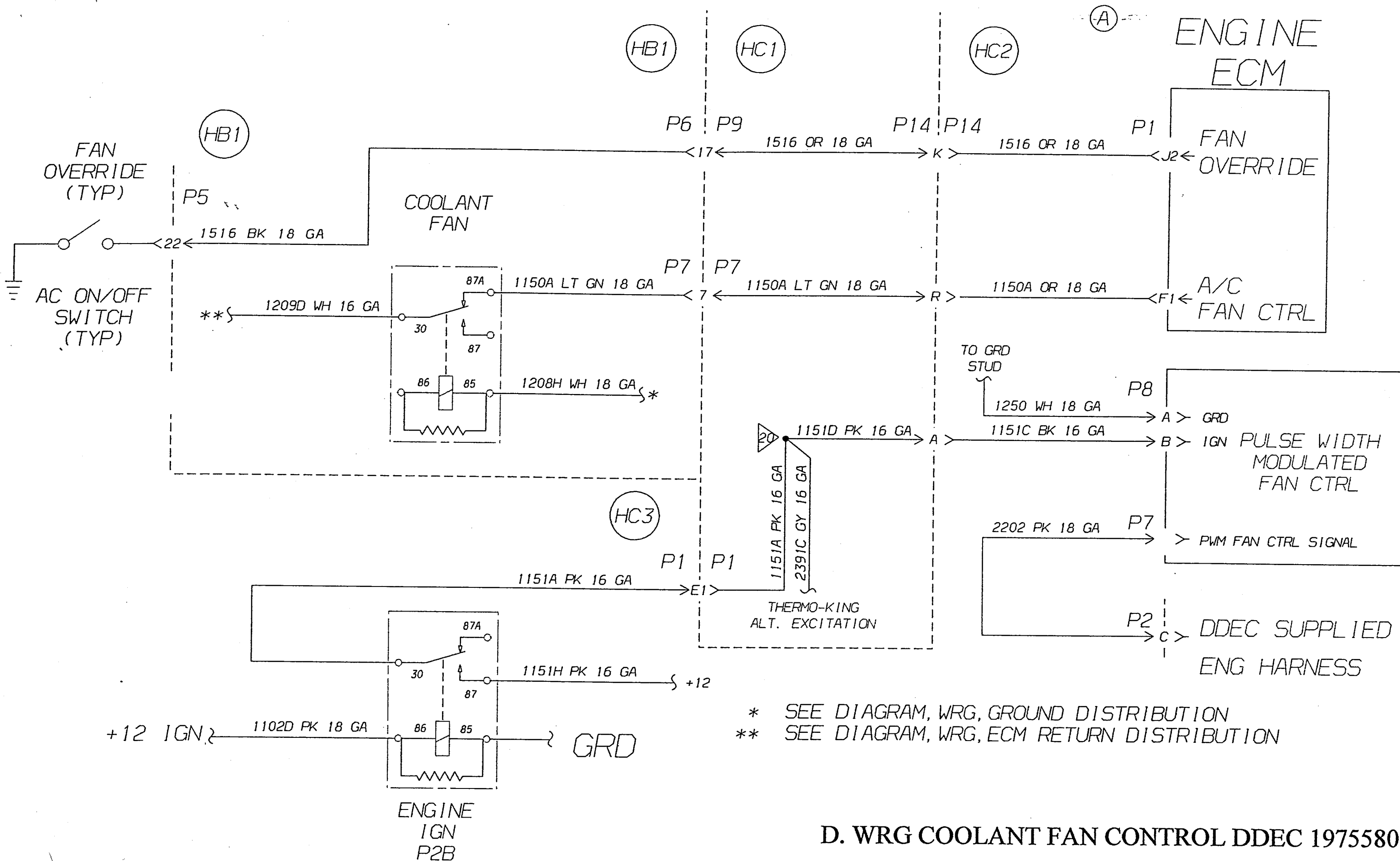
(A)

FUSED POWER DISTRIBUTION  
FAN CTRL



\* SEE DIAGRAM, WRG, GROUND DISTRIBUTION

D. W. COOLANT FAN CONTROL M11 1995505 REV. B

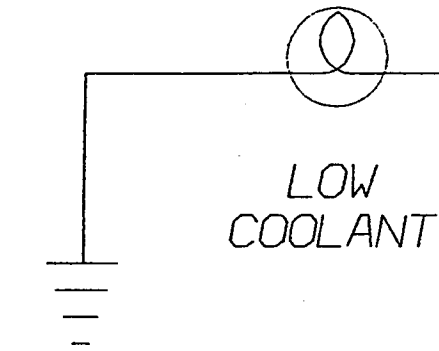


D. WRG COOLANT FAN CONTROL DDEC 1975580

WANDERLODGE  
(TYP)

P5

1420D LT BL 18 GA



LOW  
COOLANT

PILOT

YL

SENSE

BL

1420C LT BL 18 GA

P7

P7

1420 LT BL 18 GA

P13

P13

1420 LT BL 18 GA

1420A LT BL 18 GA

OR

POWER

1210 WH 18 GA

BK

GRD

FUSED PWR DIST

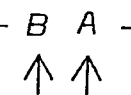
LOW COOLANT MODULE

LOW COOLANT  
MODULE



1209F WH 18 GA

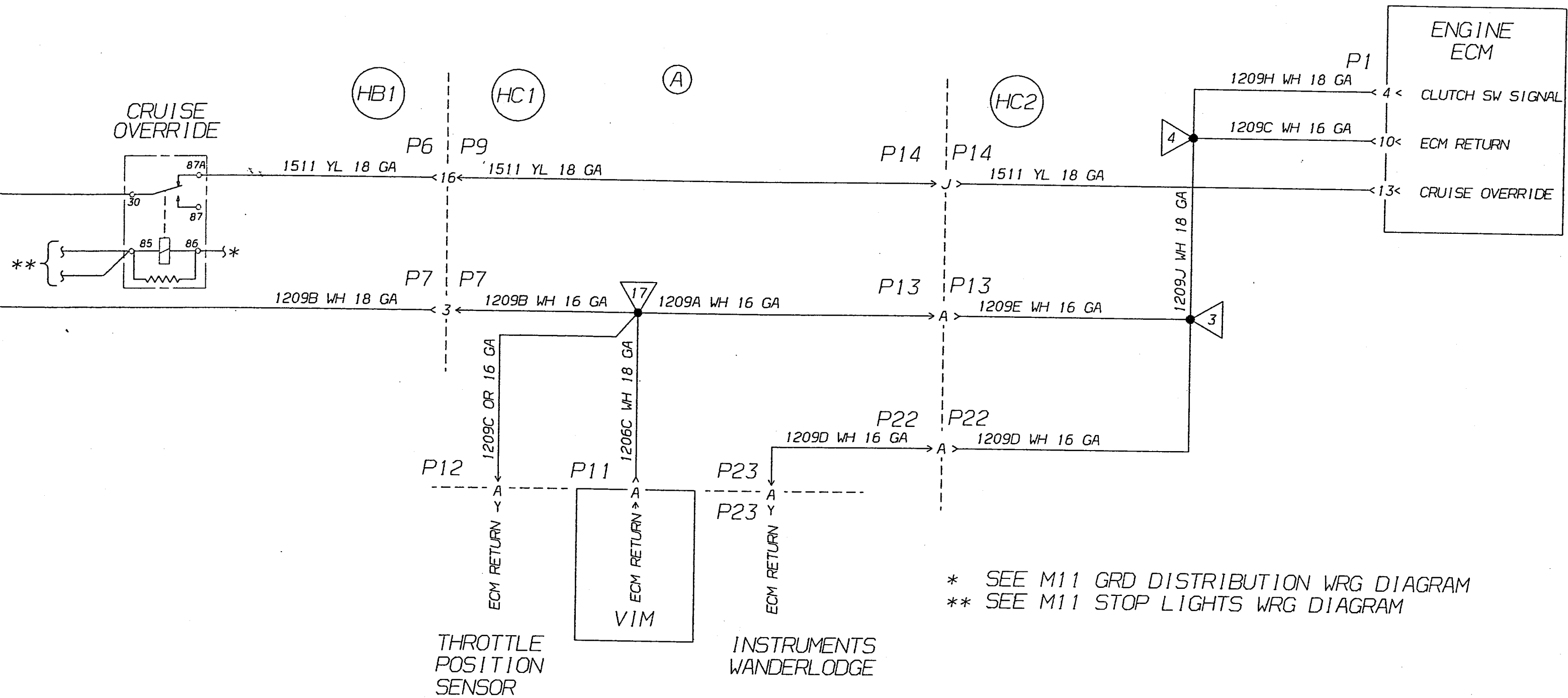
P18



LOW COOLANT  
LIGHT  
SENSOR

\* SEE DIAGRAM, WRG, GRD DIST

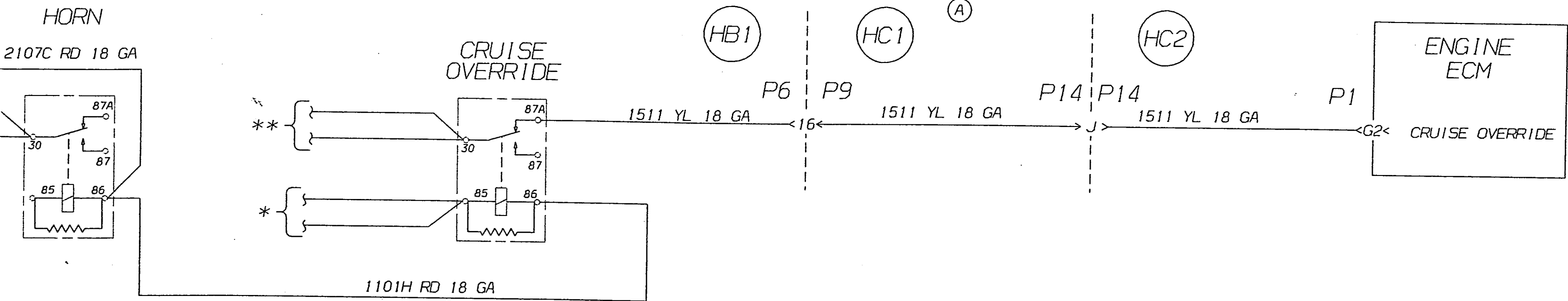
D. WRG. LOW COOLANT 0015966M



\* SEE M11 GRD DISTRIBUTION WRG DIAGRAM  
 \*\* SEE M11 STOP LIGHTS WRG DIAGRAM

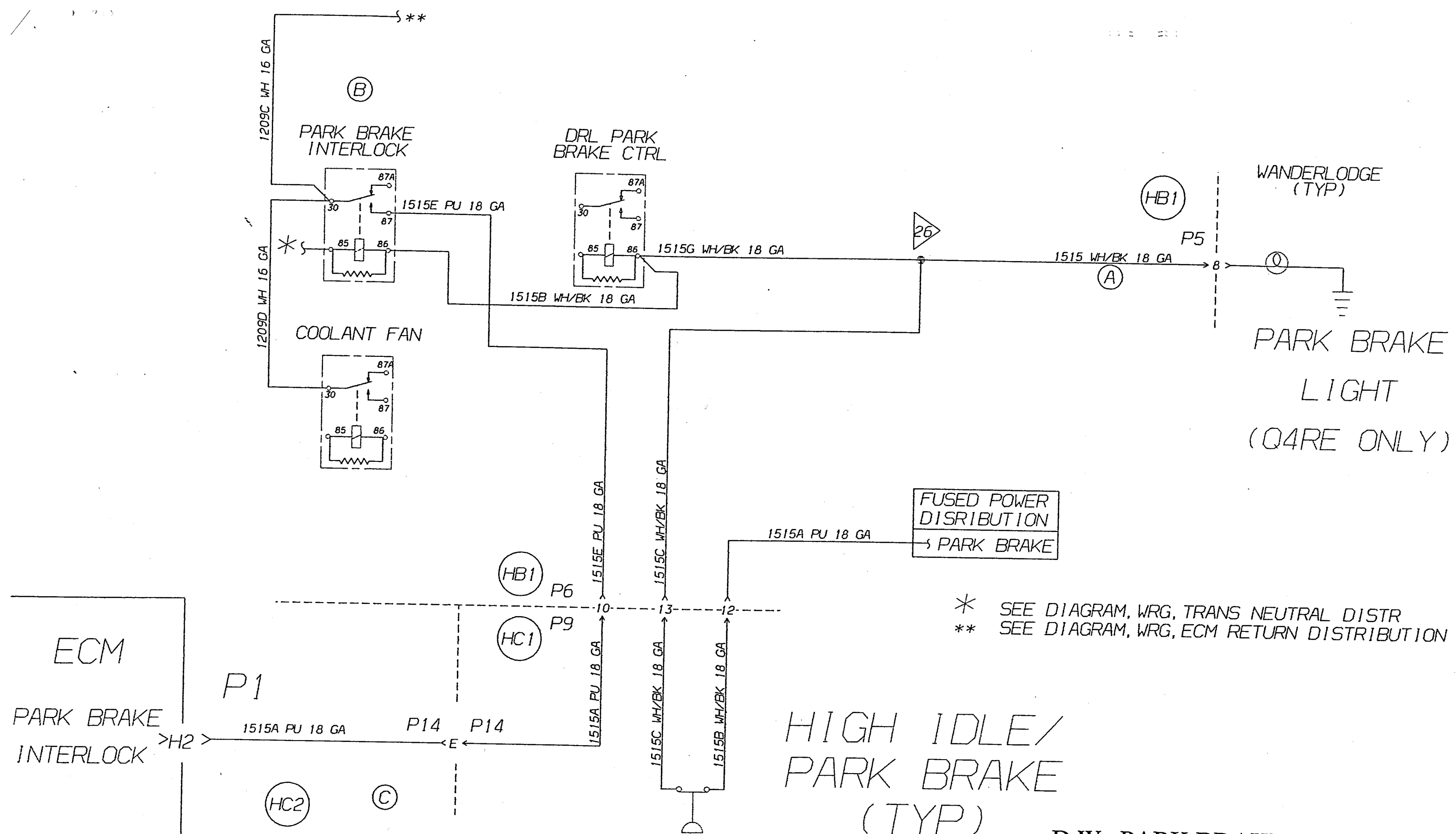
D. WRG. CRUISE M11 1975614



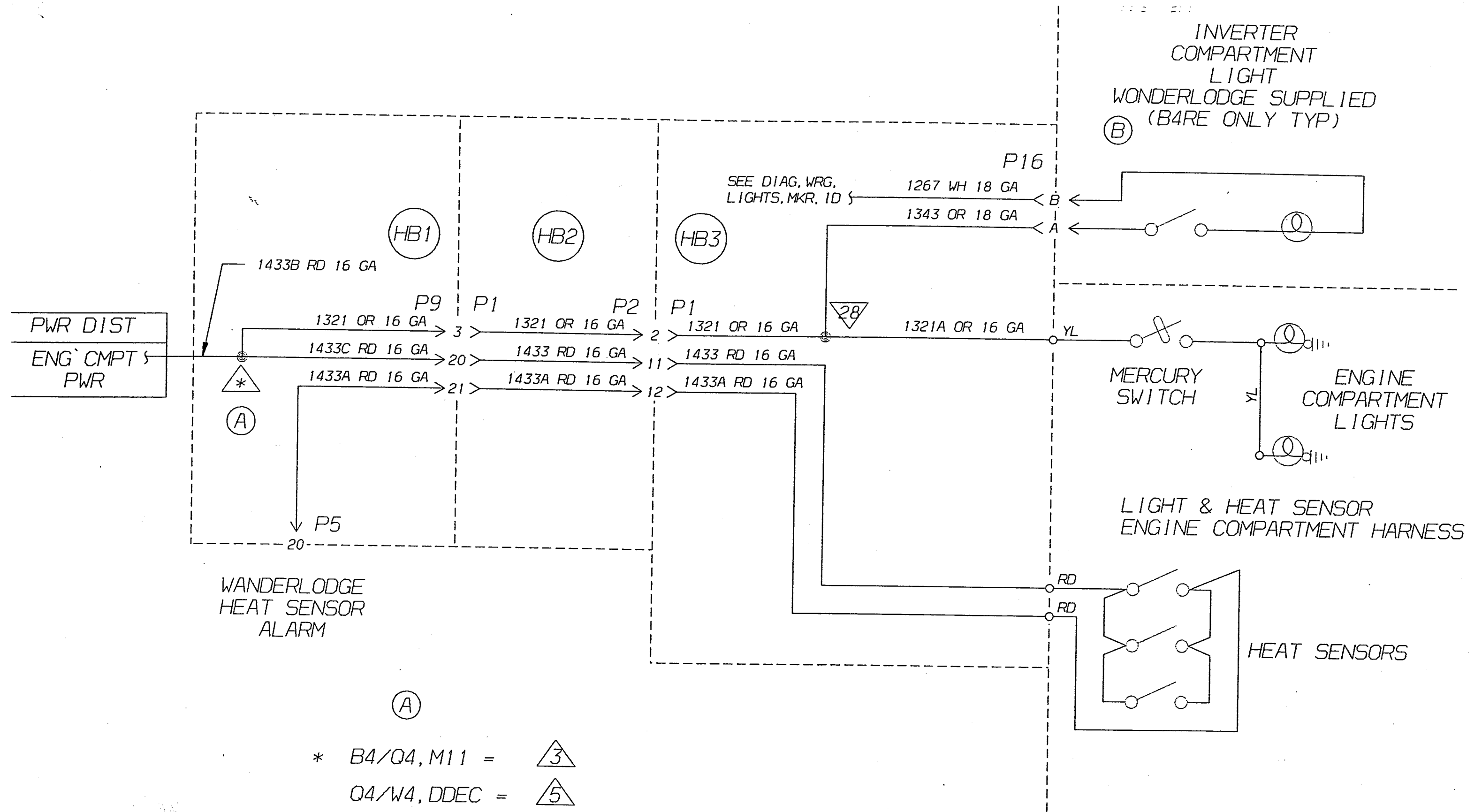


\* SEE DIAGRAM, WRG, STOP LIGHTS  
 \*\* SEE DIAGRAM, WRG, ECM RETURN

D. WRG. CRUISE DDEC 1985787 REV, A



D.W. PARK BRAKE CONTROL  
DDEC 1995463 REV.C



D.W. ENG. COMPARTMENT LIGHTS 1991579M REV. B