

ALL GROUNDS MUST GO TO BATTERY GROUND  
ALL POSITIVES MUST GO TO BATTERY POSITIVE

1 SOCKET CONNECTOR (GLOW PLUG)		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	GLOW PLUG POST ON ENGINE	TO GLOW PLUG RELAY - ALX

70 SOCKET CONNECTOR		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
2	CONSTANT VOLTAGE	TO 12 SOCKET C CONNECTOR - #1
3	SWITCH INPUT RETURN	TO 12 SOCKET C CONNECTOR - #5
4	FUEL RELAY - NO	TO 12 SOCKET C CONNECTOR - #1
5	ACU RELAY COIL (+)	TO 12 SOCKET B CONNECTOR - #2
7	FUEL RELAY COIL (-)	TO 12 SOCKET C CONNECTOR - #3
8	GLOW PLUG START RELAY	TO TERMINAL 12 - #10 RING TERMINAL
9	BATTERY (-) - GROUND	TO GROUND BATTERY CABLE SPLICE
11	CONSTANT VOLTAGE	TO 12 SOCKET C CONNECTOR - #2
12	200K (Ω)	TO 31 PIN DEF CONNECTOR - #24
13	BATTERY (-) - GROUND	TO GROUND BATTERY CABLE SPLICE
15	SCR TEMP	TO 31 PIN DEF CONNECTOR - #12
18	ACTUATOR DRIVER RETURN	TO TERMINAL 11 - #10 RING TERMINAL
20	PH INJECTOR (+)	TO 31 PIN DEF CONNECTOR - #11
21	PH INJECTOR (-)	TO 31 PIN DEF CONNECTOR - #12
22	DOO TEMP	TO 31 PIN DEF CONNECTOR - #9
23	CAN A (+)	TO CAN A SPLITTER - A
24	CAN A (-)	TO CAN A SPLITTER - B
25	CAN C (+)	TO CAN C SPLITTER - #1
26	CAN C (-)	TO CAN C SPLITTER - #2
35	BATTERY (-) - GROUND	TO GROUND BATTERY CABLE SPLICE
36	SWITCH INPUT RETURN	TO 12 SOCKET C CONNECTOR - #5
38	CONSTANT VOLTAGE	TO 12 SOCKET C CONNECTOR - #2
41	CONSTANT VOLTAGE	TO 12 SOCKET C CONNECTOR - #3
45	BATTERY (-) - GROUND	TO GROUND BATTERY CABLE SPLICE
47	BATTERY (-) - GROUND	TO GROUND BATTERY CABLE SPLICE
48	WAIT TO DISCONNECT LAMP	TO 2 SOCKET CONNECTOR - #2
54	ACU RELAY - NO	TO 12 SOCKET B CONNECTOR - #7
55	BATTERY (-) - GROUND	TO GROUND BATTERY CABLE SPLICE
57	CONSTANT VOLTAGE	TO 12 SOCKET C CONNECTOR - #3
58	DOO KEYSWITCH	TO 31 PIN DEF CONNECTOR - #4
65	BATTERY (-) - GROUND	TO GROUND BATTERY CABLE SPLICE
68	REMOTE SHUTDOWN	TO 12 SOCKET C CONNECTOR - #5
70	IGNITION SWITCHED BATTERY INPUT	TO 12 SOCKET B CONNECTOR - #1

WAIT TO DISCONNECT LAMP		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	WAIT TO DISCONNECT LAMP	TO 12 SOCKET C CONNECTOR - #7
2	WAIT TO DISCONNECT LAMP	TO 70 SOCKET - #48

31 POSITION CONNECTOR - DEF TANK		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	ACU RELAY - NO	TO 12 SOCKET B CONNECTOR - #8
2	ACU RELAY - NO	TO 12 SOCKET B CONNECTOR - #9
3	ACU RELAY - NO	TO 12 SOCKET B CONNECTOR - #5
4	IGNITION	TO 70 SOCKET - #59
5	ACU SUPPLY BATTERY (-)	TO GROUND BATTERY CABLE SPLICE
6	ACU SUPPLY BATTERY (-)	TO GROUND BATTERY CABLE SPLICE
7	ACU SUPPLY BATTERY (-)	TO GROUND BATTERY CABLE SPLICE
8	SCR TEMP	TO 70 SOCKET - #15
9	DOO TEMP	TO 70 SOCKET - #22
11	PH INJECTOR (+)	TO 70 SOCKET - #20
12	PH INJECTOR (-)	TO 70 SOCKET - #21
13	DRIP 2	TO LINE 1 HEATER 2 SOCKET CONNECTOR - #1
14	LINE 1 HEATER (SUCTION)	TO LINE 1 HEATER 2 SOCKET CONNECTOR - #2
15	DRIP 3	TO LINE 2 HEATER 2 SOCKET CONNECTOR - #1
16	LINE 2 HEATER (RETURN)	TO LINE 2 HEATER 2 SOCKET CONNECTOR - #2
17	DRIP 4	TO LINE 3 HEATER 2 SOCKET CONNECTOR - #1
18	LINE 3 HEATER (PRESSURE)	TO LINE 3 HEATER 2 SOCKET CONNECTOR - #2
19	COOLANT VALVE CONTROL	TO COOLANT DIVERTER CONNECTOR - #1
20	CAN A (+)	TO CAN A SPLITTER - B
21	CAN A (-)	TO CAN A SPLITTER - A
22	CAN C (+)	TO CAN C SPLITTER - #2
23	CAN C (-)	TO CAN C SPLITTER - #1
24	MSRS (Ω)	TO 70 SOCKET - #12

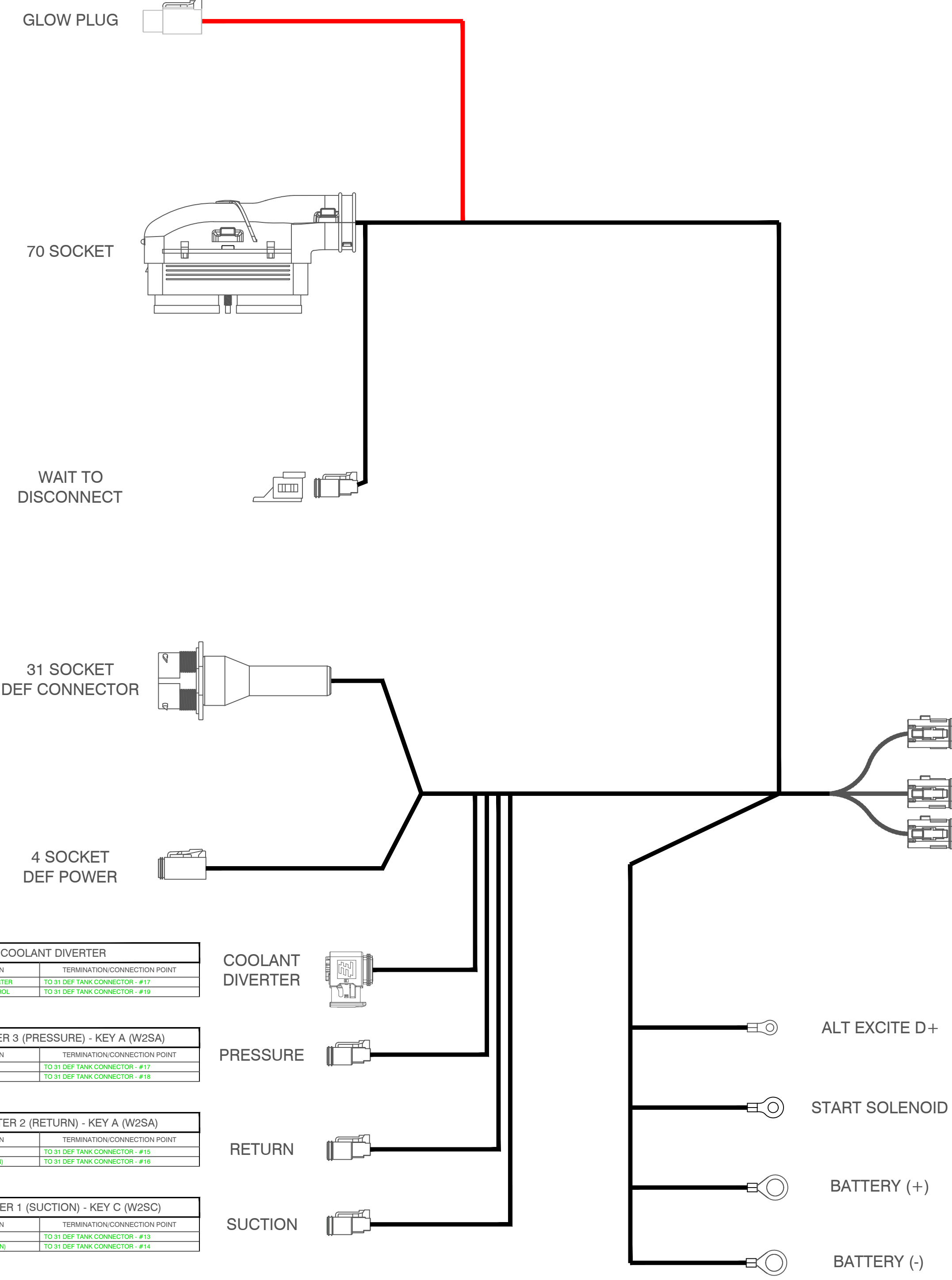
4 SOCKET CONNECTOR (DEF CONNECTOR)		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	CAN C (+)	TO CAN C SPLITTER - #2
2	CAN C (-)	TO CAN C SPLITTER - #1
3	GROUND	TO GROUND BATTERY CABLE SPLICE
4	ACU RELAY - NO	TO 12 SOCKET B CONNECTOR - #10

COOLANT DIVERTER		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	DRIP 4 COOLANT DIVERTER	TO 31 DEF TANK CONNECTOR - #17
2	COOLANT VALVE CONTROL	TO 31 DEF TANK CONNECTOR - #18

LINE HEATER 3 (PRESSURE) - KEY A (W2SA)		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	DRIP 4	TO 31 DEF TANK CONNECTOR - #17
2	LINE 3	TO 31 DEF TANK CONNECTOR - #18

LINE HEATER 2 (RETURN) - KEY A (W2SA)		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	DRIP 3	TO 31 DEF TANK CONNECTOR - #15
2	LINE 2 HEATER (RETURN)	TO 31 DEF TANK CONNECTOR - #16

LINE HEATER 1 (SUCTION) - KEY C (W2SC)		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	DRIP 2	TO 31 DEF TANK CONNECTOR - #13
2	LINE 1 HEATER (SUCTION)	TO 31 DEF TANK CONNECTOR - #14



12 SOCKET - CUSTOMER CONNECTOR		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	REMOTE ENGINE SHUTDOWN	
2	ECM SWITCH RETURN	
3	START SOLENOID	
4	EXTERNAL ALARM RELAY OUTPUT	
5	CAN DATA LINK HIGH	
6	CAN DATA LINK LOW	
7	J1939 CAN HIGH	
8	J1939 CAN LOW	
9	CAN SHIELD	
10	KEYSWITCH INPUT	
11	CONSTANT VOLTAGE SUPPLY	
12	GROUND	

12 SOCKET 'C' KEY CONNECTOR (GREEN) - POWER		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	CONSTANT VOLTAGE	TO 12 SOCKET - #2
2	CONSTANT VOLTAGE	TO 70 SOCKET - #11
3	CONSTANT VOLTAGE	TO 70 SOCKET - #28
4	CONSTANT VOLTAGE	TO 70 SOCKET - #41
5	CONSTANT VOLTAGE	TO 70 SOCKET - #57
6	SWITCH INPUT RETURN	TO 70 SOCKET - #20
7	SWITCH INPUT RETURN	TO 70 SOCKET - #21
8	WAIT TO DISCONNECT LAMP	TO WAIT TO DISCONNECT 2 SOCKET - #1
9	BATTERY (-)	TO GROUND BATTERY CABLE SPLICE
10	BATTERY (+)	TO POWER BATTERY CABLE SPLICE
11	BATTERY (+)	TO POWER BATTERY CABLE SPLICE
12	BATTERY (-)	TO POWER BATTERY CABLE SPLICE

12 SOCKET 'D' KEY CONNECTOR (BROWN) - ENGINE		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	FUEL RELAY - NO	TO 70 SOCKET - #4
2	FUEL RELAY - COIL (+)	TO 70 SOCKET - #7
3	FUEL RELAY - COIL (-)	TO GROUND BATTERY CABLE SPLICE
4	REMOTE SHUTDOWN	TO 12 SOCKET - #5
5	CAN LOW	TO CAN A SPLITTER - B
6	CAN HIGH	TO CAN A SPLITTER - A
7	J1939 SHIELD	
8	J1939 SHIELD	
11	STARTER 1 - NO	TO STARTER RING TERMINAL
12	STARTER 1 - NO	TO STARTER RING TERMINAL

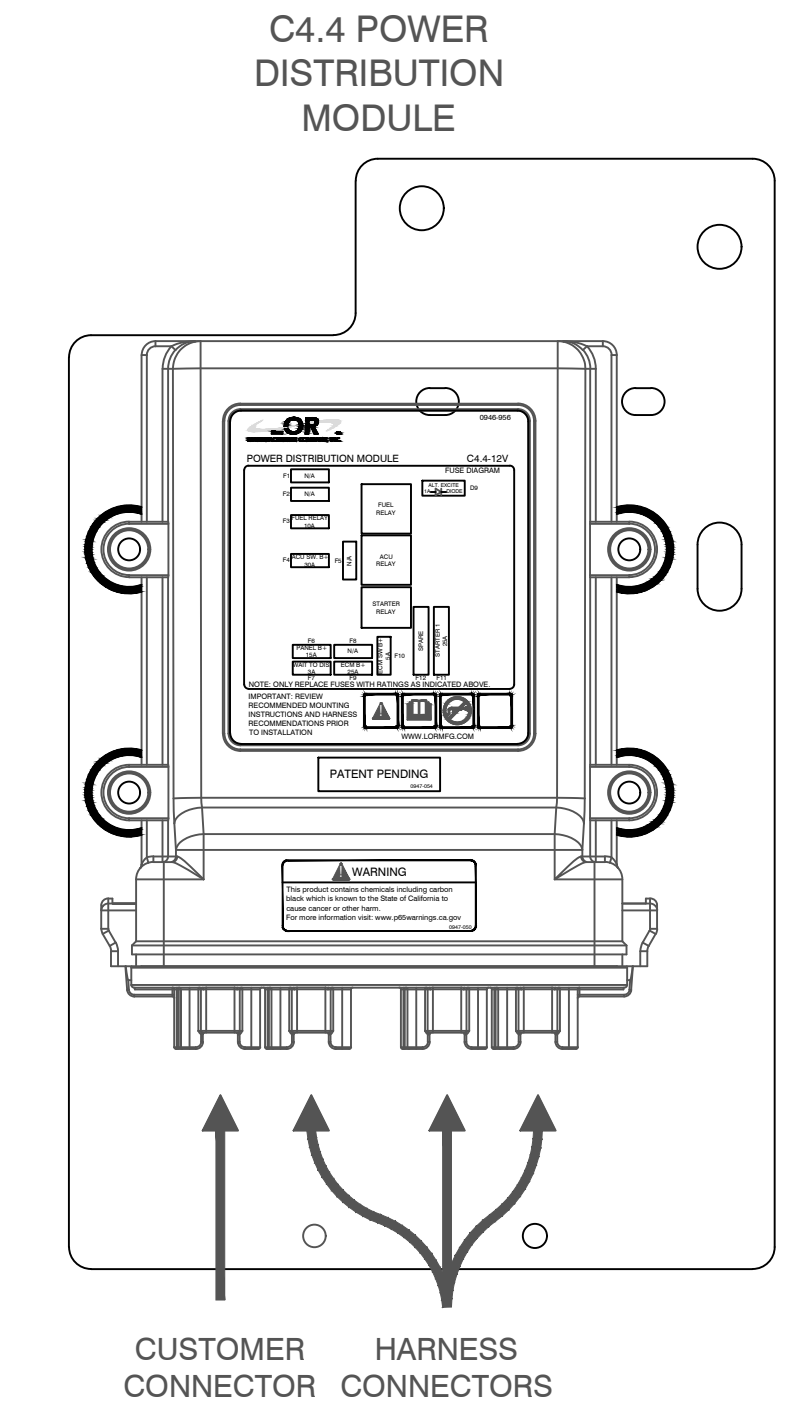
12 SOCKET 'B' KEY CONNECTOR (BLACK) - ENGINE		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	IGNITION SWITCHED BATTERY INPUT	TO 70 SOCKET - #10
2	ACU RELAY COIL (+)	TO 70 SOCKET - #5
3	ACU RELAY - COIL (-)	TO GROUND BATTERY CABLE SPLICE
4	ENGINE ALTERNATOR EXCITE	TO TERMINAL 2 - ALT EXCITE #10 RING TERMINAL
7	ACU RELAY - NO	TO 70 SOCKET - #54
8	ACU RELAY - NO	TO 31 SOCKET CONNECTOR - #1
9	ACU RELAY - NO	TO 31 SOCKET CONNECTOR - #2
10	ACU RELAY - NO	TO 12 SOCKET CONNECTOR - #3
11	ACU RELAY - NO	TO 4 SOCKET DEF - #4

TERMINAL [2] - ALTERNATOR EXCITE		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
2	ENGINE ALTERNATOR EXCITE	TO 12 SOCKET B CONNECTOR - #4

TERMINAL [1] - STARTER		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
11	STARTER 1 - NO	TO 12 SOCKET D CONNECTOR - #11
12	STARTER 1 - NO	TO 12 SOCKET D CONNECTOR - #12

TERMINAL [3] - BATTERY (+)		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
3	BATTERY (+)	TO BATTERY (+) WIRES

TERMINAL [4] - BATTERY (-)		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
4	BATTERY (-)	TO GROUND WIRES



BATTERY CABLES				
WIRE COLOR	GAUGE	DESCRIPTION	TERMINATION/CONNECTION POINT	TOTAL LENGTH
[A] RED	6 GA.	STARTER TO ALT BATTERY (+)	3/8" RING TERMINAL TO 1/4" RING TERMINAL	22 IN.
[B] BLACK	6 GA.	STARTER TO ALT BATTERY (-)	3/8" RING TERMINAL TO 1/4" RING TERMINAL	20 IN.
[C] BLACK	6 GA.	STARTER ENGINE BLOCK (-)	3/8" RING TERMINAL TO 3/8" RING TERMINAL	7 IN.

