

COLOR KEY	
RED	POSITIVE
BLACK	GROUND
GREEN	INPUT
BLUE	OUTPUT
LT. BLUE	CAN-BUS/J-1939

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

OK TO ELEVATE SPEED		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	SWITCH INPUT RETURN	TO SWITCH TO GROUND INPUT RETURN SPICE
2	SWITCH INPUT RETURN	TO SOCKET -#3
3	SWITCH INPUT RETURN	3PIN JUMPER

AUTO ETHER AID		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	AUTO ETHER AID	TO 12 SOCKET BLACK CONNECTOR -#9
2	AUTO ETHER AID GROUND	TO BATTERY (-) LUG

70 SOCKET CONNECTOR		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
2	UNSWITCHED BATTERY (+)	TO UNSWITCHED BATTERY SPICE B
3	SWITCH INPUT RETURN	TO OK TO ELEVATE START 2 SOCKET -#2
5	STARTER MOTOR CRANK REQUEST	TO 12 PIN CUSTOMER CONNECTOR -#3
8	GLOW PLUG COIL (+)	TO 12 SOCKET GRAY CONNECTOR -#2
10	AUTO ETHER AID	TO 12 SOCKET BLACK CONNECTOR -#9
11	UNSWITCHED BATTERY (-)	TO UNSWITCHED BATTERY SPICE B
13	UNSWITCHED BATTERY (+)	TO BATTERY (+) LUG
17	STARTER MOTOR COIL (-)	TO 12 SOCKET BLACK CONNECTOR -#2
19	STARTER MOTOR COIL (+)	TO 12 SOCKET BLACK CONNECTOR -#1
20	FUEL LIFT PUMP RELAY COIL (+)	TO 12 SOCKET BLACK CONNECTOR -#3
22	FUEL LIFT PUMP POWER SUPPLY	TO 12 SOCKET BLACK CONNECTOR -#11
23	J1939 (-)	TO 12 PIN CUSTOMER CONNECTOR -#7
25	J1939 (+)	TO 12 PIN CUSTOMER CONNECTOR -#8
30	RELAY RETURN FROM CIC	TO RELAY (-) SPICE
32	UNSWITCHED BATTERY (-)	TO BATTERY (-) LUG
36	SWITCH TO GROUND INPUT RETURN	TO SWITCH TO GROUND INPUT RETURN SPICE B
38	UNSWITCHED BATTERY (+)	TO UNSWITCHED BATTERY SPICE B
41	UNSWITCHED BATTERY (-)	TO BATTERY (-) LUG
45	UNSWITCHED BATTERY (+)	TO BATTERY (+) LUG
47	UNSWITCHED BATTERY (-)	TO BATTERY (-) LUG
57	UNSWITCHED BATTERY (+)	TO UNSWITCHED BATTERY SPICE B
66	WAIT TO DISCONNECT LAMP	TO WAIT TO DISCONNECT -#1
68	UNSWITCHED BATTERY (-)	TO BATTERY (-) LUG
69	REMOTE SHUTDOWN	TO 12 PIN CUSTOMER CONNECTOR -#1
70	IGNITION SWITCHED BATTERY INPUT	TO 12 SOCKET BLACK CONNECTOR -#7

WAIT TO DISCONNECT LAMP		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	WAIT TO DISCONNECT LAMP	TO 70 SOCKET CONNECTOR -#59
2	WAIT TO DISCONNECT LAMP (-)	TO BATTERY (-) LUG

ALTERNATOR EXCITE - #10 RING TERMINAL		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
#10	ENGINE ALTERNATOR EXCITE D+	TO 12 SOCKET A CONNECTOR -#9

GLOW PLUG - 1/4" RING TERMINAL		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	GLOW PLUG POST ON ENGINE	TO GLOW PLUG SPICE

STARTER CONNECTOR - 9 PIN		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
A	STARTER N/O	TO 12 SOCKET BROWN CONNECTOR -#1
B	STARTER N/O	TO 12 SOCKET BROWN CONNECTOR -#2
C	STARTER BATTERY (-)	TO BATTERY (-) LUG

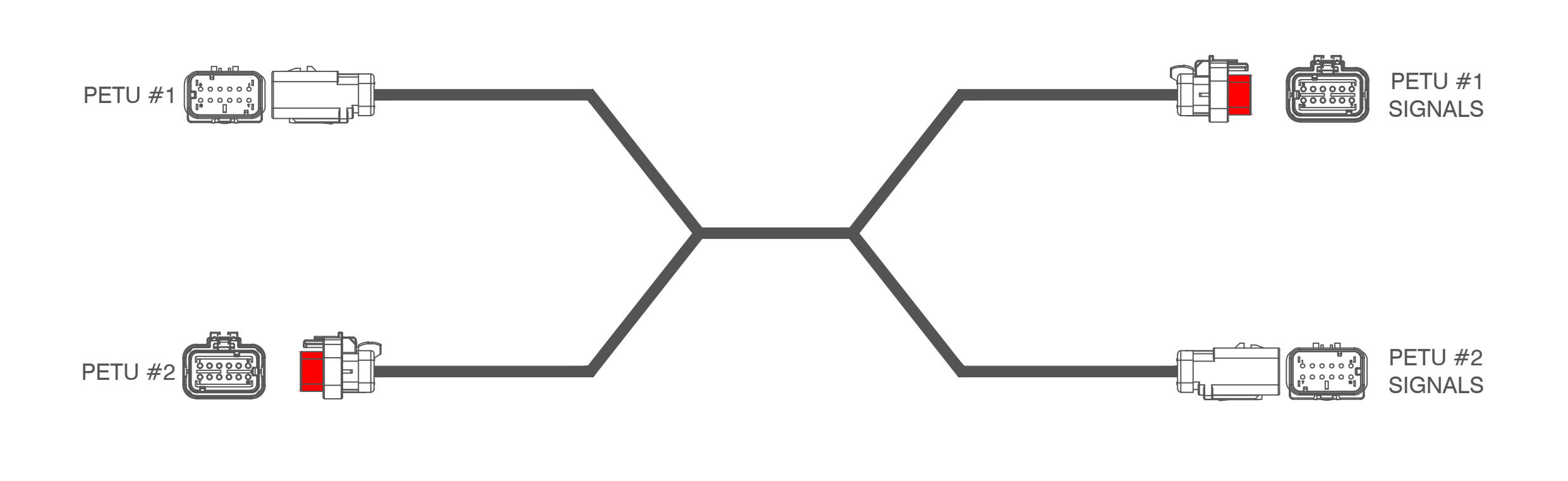
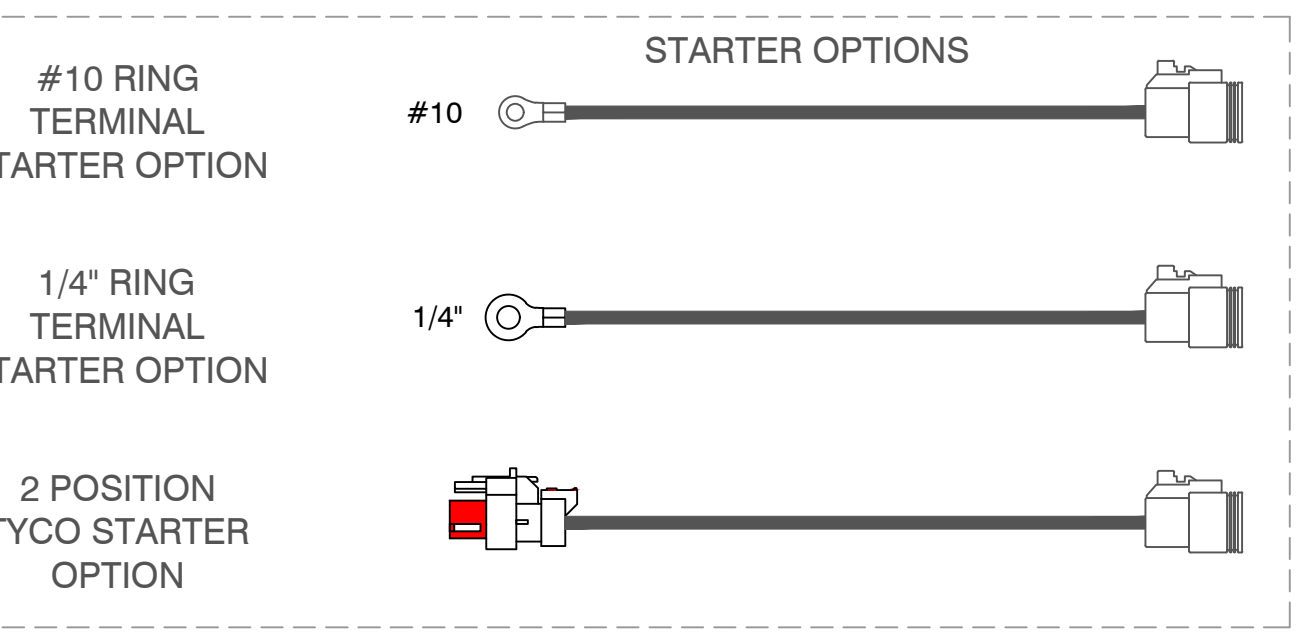
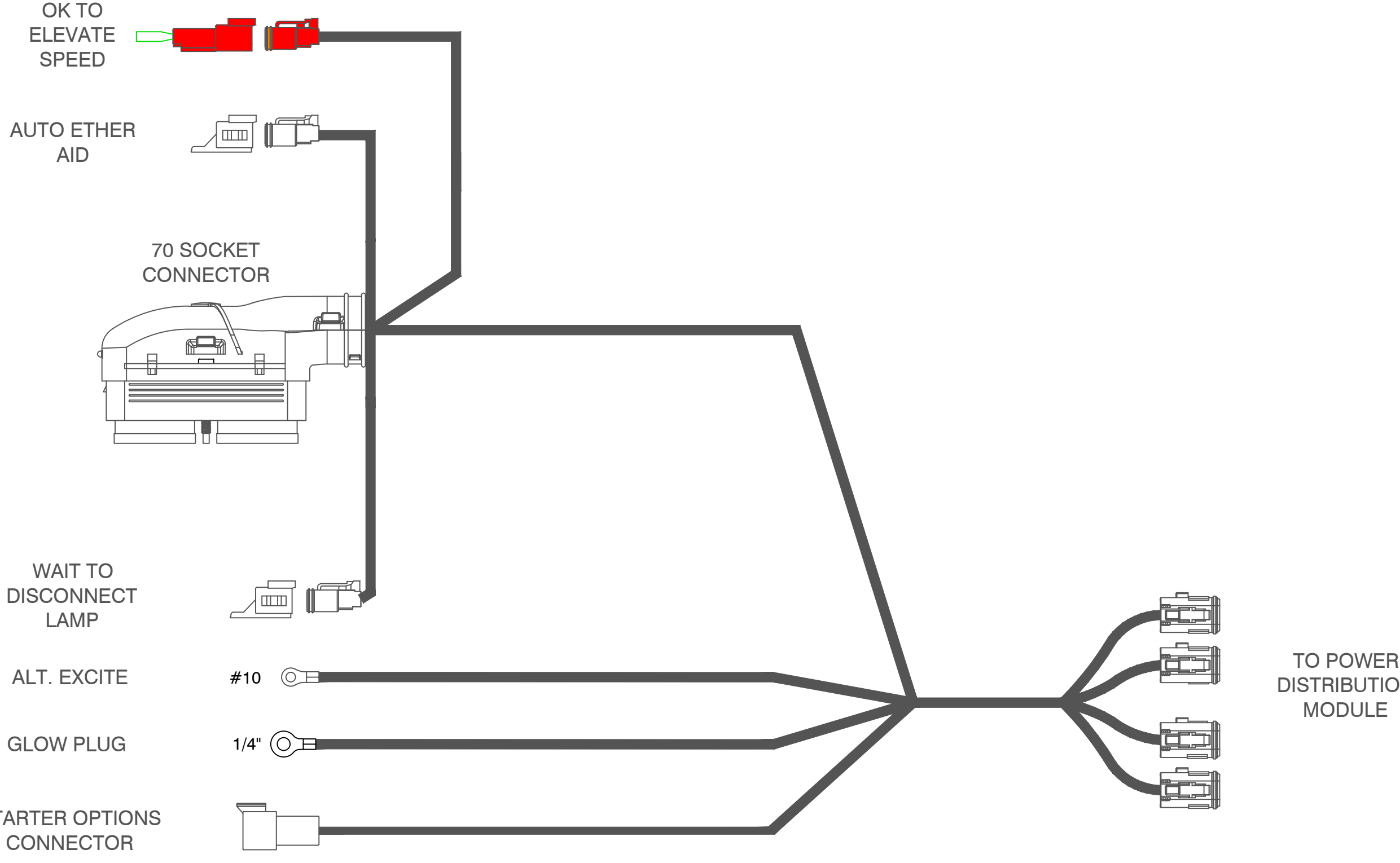
STARTER OPTION - #10 RING TERMINAL		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
#10	STARTER 1 - N/O	TO 3 SOCKET STARTER CONNECTOR ONE - A
#10	STARTER 1 - N/O	TO 3 SOCKET STARTER CONNECTOR ONE - B

STARTER OPTION - 1/4" RING TERMINAL		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1/4"	STARTER 1 - N/O	TO 3 SOCKET STARTER CONNECTOR TWO - A
1/4"	STARTER 1 - N/O	TO 3 SOCKET STARTER CONNECTOR TWO - B

STARTER OPTION - 2 POSITION TYCO CONNECTOR		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	STARTER 1 - GROUND	TO 3 SOCKET STARTER CONNECTOR THREE - C
2	STARTER 1 - N/O	TO 3 SOCKET STARTER CONNECTOR THREE - A

PETU #1		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
3	DEF PRESSURE SENSOR SIGNAL	TO PETU #1 SIGNALS -#3
4	DEF PRESSURE SENSOR GROUND	TO PETU #1 SIGNALS -#4
5	DEF PUMP MOTOR SUPPLY	TO PETU #1 SIGNALS -#5
6	DEF PUMP MOTOR GROUND	TO PETU #1 SIGNALS -#6
7	DEF PUMP MOTOR PWR	TO PETU #1 SIGNALS -#7
8	DEF PUMP REVERTING VALVE (S)	TO PETU #1 SIGNALS -#8
9	DEF PUMP REVERTING VALVE (HS)	TO PETU #1 SIGNALS -#9
10	DEF PRESSURE SENSOR SUPPLY	TO PETU #1 SIGNALS -#10
12	COOLANT DIVERter VALVE (V)	TO PETU #1 SIGNALS -#12

PETU #2		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	COOLANT DIVERter VALVE RETURN	TO PETU #2 SIGNALS -#1
2	DEF RETURN HEATED LINE (-)	TO PETU #2 SIGNALS -#2
3	DEF RETURN HEATED LINE (+)	TO PETU #2 SIGNALS -#3
4	DEF PRESSURE HEATED LINE (+)	TO PETU #2 SIGNALS -#4
5	DEF PRESSURE HEATED LINE (-)	TO PETU #2 SIGNALS -#5
6	DEF SUCTION HEATED LINE (-)	TO PETU #2 SIGNALS -#6
7	DEF SUCTION HEATED LINE (+)	TO PETU #2 SIGNALS -#7
8	DEF TANK HEADER BATTERY (+)	TO PETU #2 SIGNALS -#8
9	DEF TANK HEADER BATTERY (-)	TO PETU #2 SIGNALS -#9
10	CAN (-)	TO PETU #2 SIGNALS -#10
11	DEF TANK HEADER GROUND	TO PETU #2 SIGNALS -#11



BATTERY (+) LUG		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	BATTERY (+)	TO BATTERY (+) LUG

BATTERY (-) LUG		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	BATTERY (-)	TO BATTERY (-) LUG

12 PIN CUSTOMER CONNECTOR		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	REMOTE SHUTDOWN	TO 70 SOCKET CONNECTOR -#68
2	SWITCH TO GROUND INPUT RETURN	TO SWITCH TO GROUND INPUT RETURN SPICE
3	STARTER MOTOR CRANK REQUEST	TO 70 SOCKET CONNECTOR -#5
7	J1939 (-)	TO 70 SOCKET CONNECTOR -#23
8	J1939 (+)	TO 70 SOCKET CONNECTOR -#25
9	CAN SHIELD	(SHIELD IN J1939-11 CABLE, NOT TERMINATED)
10	IGNITION SWITCH START SIGNAL	TO 12 SOCKET GRAY CONNECTOR -#9
11	CUSTOMER CONNECTOR CONSTAT	TO 12 SOCKET BLACK CONNECTOR -#8
12	BATTERY (-)	TO BATTERY (-) LUG

12 SOCKET GRAY CONNECTOR		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
6	ENGINE ALTERNATOR EXCITE D+	TO ALTERNATOR EXCITE #10 RING TERMINAL
7	REL1 COIL (-)	TO BATTERY (-) LUG
8	IGNITION SWITCH START SIGNAL	TO 12 PIN CUSTOMER CONNECTOR -#10
11	GLOW PLUG RELAY COIL (-)	TO RELAY (-) SPICE
12	GLOW PLUG RELAY COIL (+)	TO 70 SOCKET CONNECTOR -#8

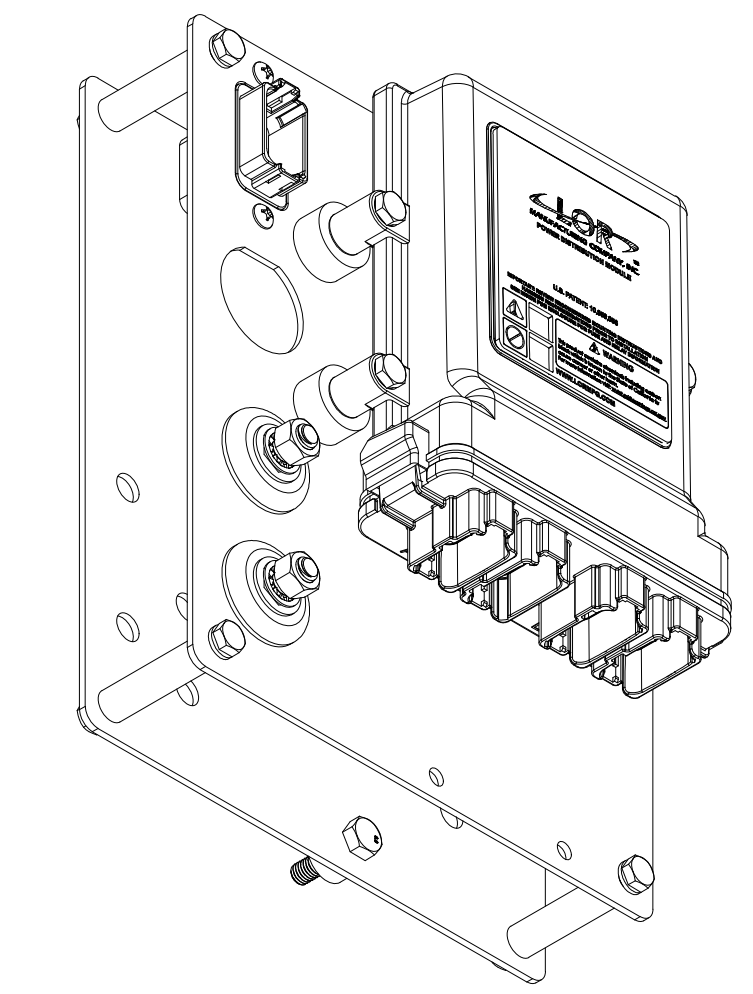
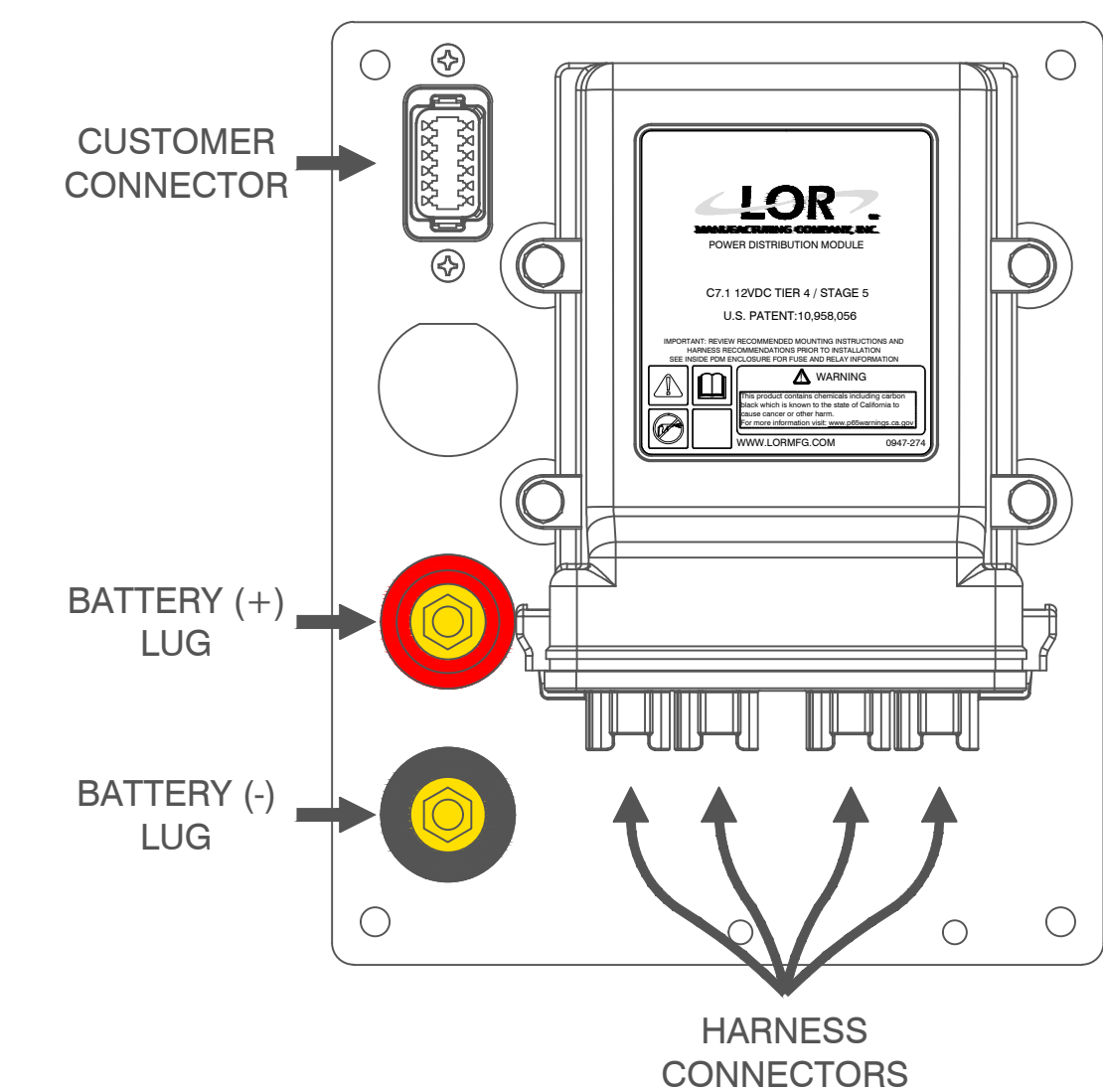
12 SOCKET GREEN CONNECTOR		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	BATTERY (+)	TO BATTERY (+) LUG
2	BATTERY (-)	TO BATTERY (-) LUG
3	BATTERY (+)	TO BATTERY (+) LUG
4	BATTERY (-)	TO BATTERY (-) LUG
5	BATTERY (+)	TO BATTERY (+) LUG
6	BATTERY (-)	TO BATTERY (-) LUG
7	GLOW PLUG	TO GLOW PLUG SPICE
8	GLOW PLUG	TO GLOW PLUG SPICE
9	GLOW PLUG	TO GLOW PLUG SPICE
10	GLOW PLUG	TO GLOW PLUG SPICE
11	GLOW PLUG	TO GLOW PLUG SPICE
12	GLOW PLUG	TO GLOW PLUG SPICE

12 SOCKET BROWN CONNECTOR		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	STARTER N/O	TO STARTER 9 PIN - A
2	STARTER N/O	TO STARTER 9 PIN - B
4	UNSWITCHED BATTERY (+)	TO UNSWITCHED BATTERY SPICE A
5	UNSWITCHED BATTERY (+)	TO UNSWITCHED BATTERY SPICE B
6	UNSWITCHED BATTERY (+)	TO UNSWITCHED BATTERY SPICE A
7	BATTERY (-)	TO BATTERY (-) LUG
8	BATTERY (+)	TO BATTERY (+) LUG
9	BATTERY (+)	TO BATTERY (+) LUG
10	BATTERY (-)	TO BATTERY (-) LUG
11	BATTERY (-)	TO BATTERY (-) LUG
12	BATTERY (+)	TO BATTERY (+) LUG

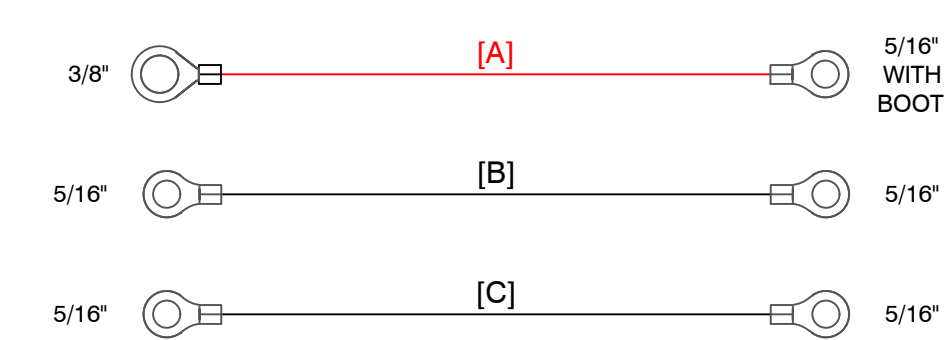
12 SOCKET BLACK CONNECTOR		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	STARTER MOTOR COIL (-)	TO 70 SOCKET CONNECTOR -#17
2	STARTER MOTOR COIL (+)	TO 70 SOCKET CONNECTOR -#19
3	FUEL LIFT PUMP RELAY COIL (+)	TO 70 SOCKET CONNECTOR -#20
4	FUEL LIFT PUMP RELAY COIL (-)	TO RELAY (-) SPICE
5	AUTO ETHER AID	TO 70 SOCKET CONNECTOR -#10
6	RELAY 2 COIL (-)	TO RELAY (-) SPICE
7	IGNITION SWITCHED BATTERY INPUT	TO 70 SOCKET CONNECTOR -#70
8	CUSTOMER CONNECTOR CONSTAT	TO 12 PIN CUSTOMER CONNECTOR -#11
9	AUTO ETHER AID	TO AUTO ETHER AID CONNECTOR -#1
11	FUEL LIFT PUMP POWER SUPPLY	TO 70 SOCKET CONNECTOR -#22

PETU #1 SIGNALS		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
3	DEF PRESSURE SENSOR SIGNAL	TO PETU #1 -#3
4	DEF PRESSURE SENSOR GROUND	TO PETU #1 -#4
5	DEF PUMP MOTOR SUPPLY	TO PETU #1 -#5
6	DEF PUMP MOTOR GROUND	TO PETU #1 -#6
7	DEF PUMP MOTOR PWR	TO PETU #1 -#7
8	DEF PUMP REVERTING VALVE (S)	TO PETU #1 -#8
9	DEF PUMP REVERTING VALVE (HS)	TO PETU #1 -#9
10	DEF PRESSURE SENSOR SUPPLY	TO PETU #1 -#10
12	COOLANT DIVERter VALVE (V)	TO PETU #1 -#12

PETU #2 SIGNALS		
#	DESCRIPTION	TERMINATION/CONNECTION POINT
1	COOLANT DIVERter VALVE RETURN	TO PETU #2 -#1
2	DEF RETURN HEATED LINE (-)	TO PETU #2 -#2
3	DEF RETURN HEATED LINE (+)	TO PETU #2 -#3
4	DEF PRESSURE HEATED LINE (+)	TO PETU #2 -#4
5	DEF PRESSURE HEATED LINE (-)	TO PETU #2 -#5
6	DEF SUCTION HEATED LINE (-)	TO PETU #2 -#6
7	DEF SUCTION HEATED LINE (+)	TO PETU #2 -#7
8	DEF TANK HEADER BATTERY (+)	TO PETU #2 -#8
9	DEF TANK HEADER BATTERY (-)	TO PETU #2 -#9
10	CAN (-)	TO PETU #2 -#10
11	DEF TANK HEADER GROUND	TO PETU #2 -#11



BATTERY CABLES		
AL	DESCRIPTION	TERMINATION/CONNECTION POINT
[A]	STARTER TO ALT BATTERY (+)	5/16" RING TERMINAL TO 5/16" RING TERMINAL
[B]	STARTER B- TO BLOCK GROUND	5/16" RING TERMINAL TO 5/16" RING TERMINAL
[C]	STARTER B- TO ALT GROUND	5/16" RING TERMINAL TO 5/16" RING TERMINAL



(2X) M8 X 1.25X 28 BOLTS

(2X) STANDOFFS

(4X) STANDOFFS FOR MOUNTING PLATE

(8X) 1/4-20X3/4SS BOLTS FOR STANDOFFS

(8X) 1/4 SS LOCK WASHERS FOR STANDOFFS