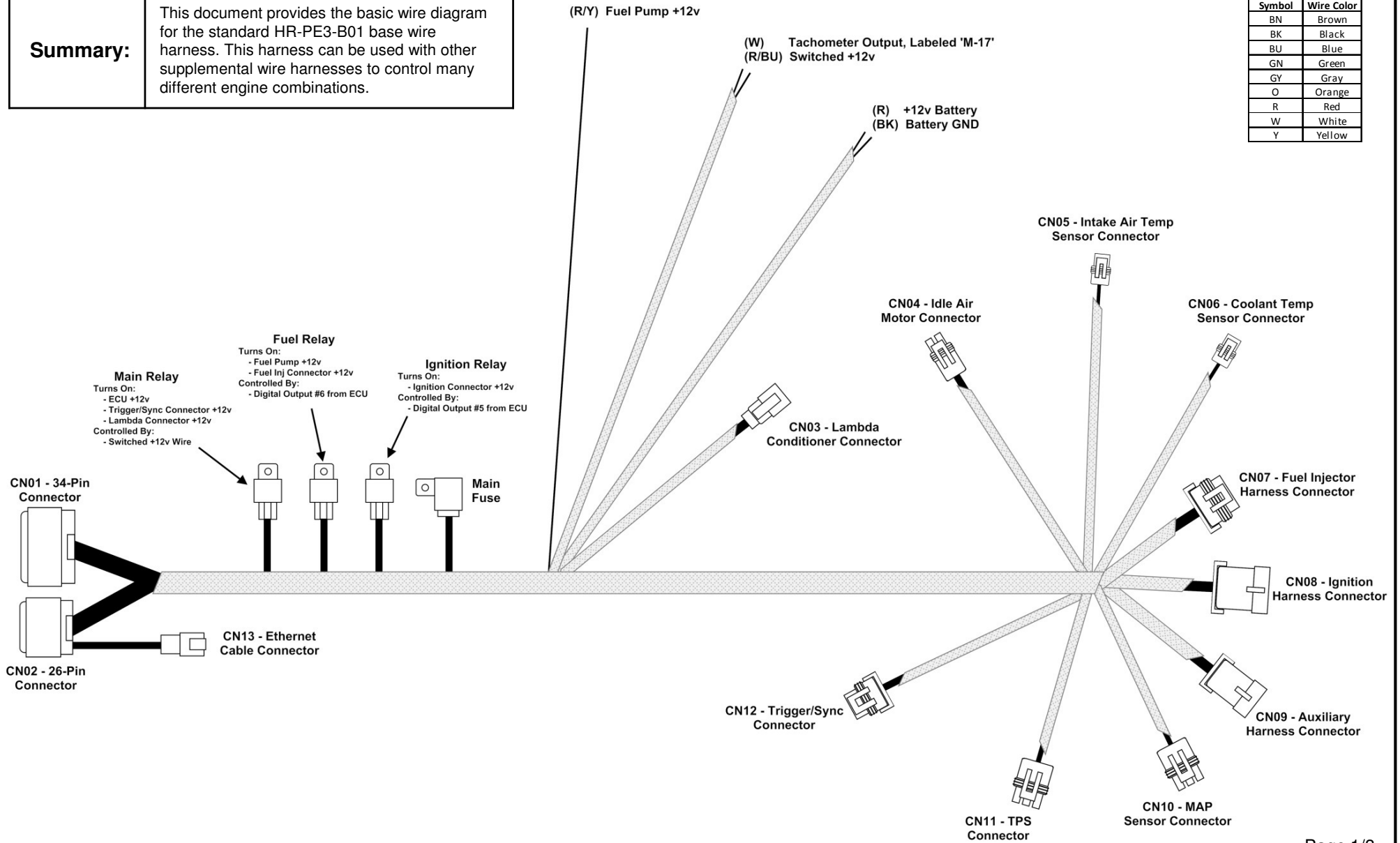


**Summary:**

This document provides the basic wire diagram for the standard HR-PE3-B01 base wire harness. This harness can be used with other supplemental wire harnesses to control many different engine combinations.

Wire Color Key	
Symbol	Wire Color
BN	Brown
BK	Black
BU	Blue
GN	Green
GY	Gray
O	Orange
R	Red
W	White
Y	Yellow

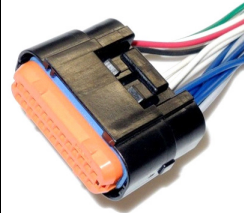


Designator:		CN01	
Description:		34-Pin PE3 Main Connector	
Pin	Color	Label	Function
1	GY	M-01	Coil #1
2	W	M-02	Digital Output #2
3	BL	M-03	Injector #1
4	GY	M-04	Coil #2
5	W	M-05	Digital Output #5
6	W	M-06	Dig Out #10/Coil #8*
7	W	M-07	Digital Output #6
8	W	M-08	Analog Input #5
9	BK	M-09	Battery GND
10	BU	M-10	Injector #2
11	W	M-11	Digital Output #1
12	W	M-12	MAP Signal
13	W	M-13	Digital Input #2
14	W	M-14	Digital Input #1
15	W	M-15	Analog Input #8
16	O	M-16	+5v Supply
17	W	M-17	Tachometer Output
18	BK	M-18	Battery GND
19	-	-	Digital Output #3
20	BK	M-20	Battery GND
21	-	-	Digital Output #4
22	W	M-22	Dig Out #7/Coil #5*
23	W	M-23	Analog Input #6
24	W	M-24	Dig Out #8/Coil #6*
25	W	M-25	Dig Out #9/Coil #7*
26	BN	M-26	+5v GND
27	-	-	Digital Input #6
28	W	M-28	Air Temp Signal
29	W	M-29	Coolant Temp Signal
30	W	M-30	TPS Signal
31	W	M-31	Analog Input #7
32	W	M-32	Trigger Signal (Crank)
33	W	M-33	Sync Signal (Cam)
34	R	M-34	Battery V+
<b>Mates With:</b>		34-Pin PE3 ECU Header	




\*Coil #5, #6, #7 and #8 drivers require external igniter or smart coil.

Designator:		CN02	
Description:		26-Pin PE3 Comm Connector	
Pin	Color	Label	Function
1	R	C-01	Ethernet
2	BK	C-02	Ethernet
3	-	-	Digital Input #4
4	-	-	Digital Input #5
5	-	-	Analog Input #1
6	-	-	Analog Input #2
7	-	-	CAN Bus Lo
8	-	-	CAN Bus Hi
9	W	C-09	Stepper Motor
10	BU	C-10	Injector #7
11	BU	C-11	Injector #5
12	BU	C-12	Injector #3
13	GY	C-13	Coil #3
14	GN	C-14	Ethernet
15	W	C-15	Ethernet
16	-	-	Digital Input #3
17	-	-	Digital Input #7
18	-	-	Analog Input #3
19	-	-	Analog Input #4
20	W	C-20	Stepper Motor
21	W	C-21	Stepper Motor
22	W	C-22	Stepper Motor
23	BU	C-23	Injector #8
24	BU	C-24	Injector #6
25	BU	C-25	Injector #4
26	GY	C-26	Coil #4
<b>Mates With:</b>		26-Pin PE3 ECU Header	




Designator:		CN03	
Description:		Lambda Cond Connector	
Pin	Color	Label	Function
1	R	-	Battery V+
2	W	M-08	Analog Input #5
3	BN	M-26	+5v GND
4	W	M-23	Analog Input #6
5	BK	-	Battery GND
6	-	-	-
<b>Mates With:</b>		PE lambda conditioner	




### Wire Color Key

Symbol	Wire Color
BN	Brown
BK	Black
BU	Blue
GN	Green
GY	Gray
O	Orange
R	Red
W	White
Y	Yellow


Designator:		CN04	
Description:		Idle Air Motor Connector	
Pin	Color	Label	Function
A	W	C-20	Stepper, Coil 1A
B	W	C-09	Stepper, Coil 1B
C	W	C-22	Stepper, Coil 2A
D	W	C-21	Stepper, Coil 2B
<b>Mates With:</b>		IAC stepper motor	



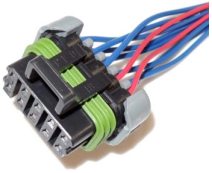
Designator:		CN05	
Description:		IAT Sensor Connector	
Pin	Color	Label	Function
A	W	M-28	Air Temp Signal
B	BN	M-26	+5v GND
<b>Mates With:</b>		Intake air temp sensor	



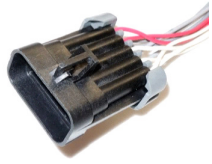
Designator:		CN06	
Description:		CLT Sensor Connector	
Pin	Color	Label	Function
A	W	M-29	Coolant Temp Signal
B	BN	M-26	+5v GND
<b>Mates With:</b>		Coolant temp sensor	



Designator: CN07				
Description: Fuel Inj Harness Connector				
Pin	Color	Label	Function	
A	BU	M-03	Injector #1	
B	BU	M-10	Injector #2	
C	BU	C-12	Injector #3	
D	BU	C-25	Injector #4	
E	BU	C-11	Injector #5	
F	BU	C-24	Injector #6	
G	BU	C-10	Injector #7	
H	BU	C-23	Injector #8	
J	R	-	Injector +12v	
K	R	-	Injector +12v	
<b>Mates With:</b>		Fuel injector sub harness		

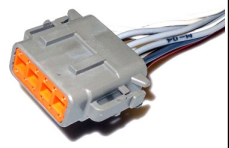


Designator: CN08				
Description: Ignition Harness Connector				
Pin	Color	Label	Function	
A	GY	M-01	Coil #1	
B	GY	M-04	Coil #2	
C	GY	C-13	Coil #3	
D	GY	C-26	Coil #4	
E	W	M-22	Dig Out #7/Coil #5*	
F	W	M-24	Dig Out #8/Coil #6*	
G	W	M-25	Dig Out #9/Coil #7*	
H	W	M-06	Dig Out #10/Coil #8*	
J	R	-	Ign Coil +12v	
K	R	-	Ign Coil +12v	
<b>Mates With:</b>		Ignition sub harness		



\*Coil #5, #6, #7 and #8 drivers require external igniter or smart coil.


Designator: CN08				
Description: Ignition Harness Connector				
Pin	Color	Label	Function	
1	GY	M-01	Coil #1	
2	GY	M-04	Coil #2	
3	GY	C-13	Coil #3	
4	GY	C-26	Coil #4	
5	W	M-22	Dig Out #7/Coil #5*	
6	W	M-24	Dig Out #8/Coil #6*	
7	W	M-25	Dig Out #9/Coil #7*	
8	W	M-06	Dig Out #10/Coil #8*	
9	BN	M-26	+5v GND	
10	BN	M-26	+5v GND	
11	R	-	Ign Coil +12v	
12	R	-	Ign Coil +12v	
<b>Mates With:</b>		Ignition sub harness		



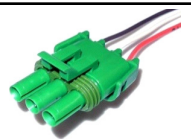
\*Coil #5, #6, #7 and #8 drivers require external igniter or smart coil.

**Notes:** Harnesses were made with one of the connectors above for CN08. Only one configuration is present in each harness.

Designator: CN09				
Description: Auxilliary Harness Connector				
Pin	Color	Label	Function	
A	W	M-11	Digital Output #1	
B	W	M-02	Digital Output #2	
C	W	M-14	Digital Input #1	
D	W	M-13	Digital Input #2	
E	O	M-16	+5v Supply	
F	BN	M-26	+5v GND	
G	W	M-31	Analog Input #7	
H	W	M-15	Analog Input #8	
<b>Mates With:</b>		Auxilliary sub harness		

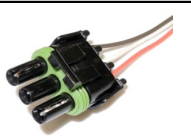


Designator: CN10				
Description: MAP Sensor Connector				
Pin	Color	Label	Function	
A	BN	M-26	+5v GND	
B	W	M-12	MAP Signal	
C	O	M-16	+5v Supply	
<b>Mates With:</b>		Manifold pressure sensor		

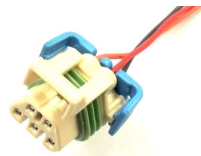


Wire Color Key	
Symbol	Wire Color
BN	Brown
BK	Black
BU	Blue
GN	Green
GY	Gray
O	Orange
R	Red
W	White
Y	Yellow

Designator: CN11				
Description: TPS Connector				
Pin	Color	Label	Function	
A	BN	M-26	+5v GND	
B	W	M-30	TPS Signal	
C	O	M-16	+5v Supply	
<b>Mates With:</b>		Throttle position sensor		



Designator: CN12				
Description: Trigger/Sync Connector				
Pin	Color	Label	Function	
A	BN	M-26	+5v GND	
B	W	M-33	Sync Signal (Cam)	
C	W	M-32	Trigger Signal (Crank)	
D	O	M-16	+5v Supply	
E	R	M-34	Battery V+	
<b>Mates With:</b>		Trigger/Sync sub harness		



Designator: CN13				
Description: Ethernet Cable Connector				
Pin	Color	Label	Function	
1	R	-	RJ-45 Pin 3	
2	BK	-	RJ-45 Pin 6	
3	GN	-	RJ-45 Pin 1	
4	W	-	RJ-45 Pin 2	
<b>Mates With:</b>		HR-PE3-C05 Ethernet Cable		

