








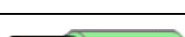










Haltech Wiring Report - Page 1

Vehicle Name: **Bad Wolf Turbo Mk2**

Product: **Haltech Nexus R3 VCU**

Assigned Resources:

Connections	Assigned Functions
Analogue Voltage Inputs on Nexus R3 VCU:	
 [W], C10	AVI1 Brake Pedal Switch 1 Input, for Brake Pedal Switch
 [W/Y], C11	AVI2 Clutch Switch Input, for Clutch Switch
 [W/GY], C12	AVI3 Coolant Temperature Input, for Coolant Temperature Sensor
 [W/V], C13	AVI4 Oil Pressure Input, for Oil Pressure Sensor
 [W/G], C14	AVI5 Throttle 1 Sensor A, for Drive By Wire
 [W/O], C15	AVI6 Throttle 1 Sensor B, for Drive By Wire
 [W/B], C16	AVI7 Intake Air Temperature Input, for Intake Air Temperature Sensor
 [W/BR], C17	AVI8 Pedal Sensor A, for Drive By Wire
 [W/R], C18	AVI9 Pedal Sensor B, for Drive By Wire
 [LG], C27	AVI10 Oil Temperature Input, for Oil Temperature Sensor
 [LG/B], C28	AVI11 Fuel Pressure Input, for Fuel Pressure Sensor
Digital Pulsed Outputs on Nexus R3 VCU:	
 [V/B], A9	DPO1 Output 1, for Generic Output 4 (Speedometer)
 [V/BR], A12	DPO2 Tacho Output, for Tachometer
 [V/R], A14	DPO3 Boost Control Solenoid, for Boost Control
 [V/O], A15	DPO4 Output 1, for Generic Output 9 (Boost Gauge)
 [V/Y], A16	DPO5 Check Engine Light Output, for Check Engine Light
Sync Pulsed Inputs on Nexus R3 VCU:	
 [GY/BR], C5	SPI1 Vehicle Speed Input, for Vehicle Speed Drive Train Sensor
 [GY/R], C6	SPI2 Front Brake Pressure Input, for Brake Pressure Sensor Front

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Vehicle Name: **Bad Wolf Turbo Mk2**
Product: **Haltech Nexus R3 VCU**

Knock Inputs on Nexus R3 VCU:



[B/L], C23

KNOCK1

Knock Sensor 1

Injection Outputs on Nexus R3 VCU:



[L], A1

INJ1

Injector Output 1



[L/B], A2

INJ2

Injector Output 2

Ignition Outputs on Nexus R3 VCU:



[Y/B], A27

IGN1

Ignition Output for Cylinders 1 and 4



[Y/R], A28

IGN2

Ignition Output for Cylinders 3 and 2

Half Bridge Outputs on Nexus R3 VCU:



[BR/B], A19

HBO1

Throttle 1 Motor A, for Drive By Wire



[BR/R], A20

HBO2

Throttle 1 Motor B, for Drive By Wire



[BR/G], A21

HBO3

Output 1, for Generic Output 8 (Oil Pressure Gauge)



[BR/P], A22

HBO4

Output 1, for Generic Output 7 (Coolant Temp Gauge)



[P/R], A18

HBO5

CAN Power Output 1, for CAN System



[P/BR], A25

HBO6

Output 1, for Generic Output 10 (Speed & USB)

25A High Current Outputs on Nexus R3 VCU:



[R/L], E1

25A-HCO1

Injector Power Output 1, for Injection System



[R/Y], E2

25A-HCO2

Ignition Coil Power Output 1, for Ignition System



[R/O], E3

25A-HCO3

Fuel Pump Relay Output, for Primary Fuel Pump



[R/G], E4

25A-HCO4

Thermofan 1 Output, for Thermofan 1

CAN Ports on Nexus R3 VCU:



[W], A23, CAN 1 H



[L], A24, CAN 1 L

CAN1

Haltech CAN Bus Port 1, for CAN System



[W], C21, CAN 2 H



[L], C22, CAN 2 L

CAN2

Haltech CAN Bus Port 2, for CAN System

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Vehicle Name: **Bad Wolf Turbo Mk2**
Product: **Haltech Nexus R3 VCU**







Trigger on Nexus R3 VCU:

	[GY], C1	Trigger (+ve)	Trigger System (+)
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Pressure Inputs on Nexus R3 VCU:

		OBPS 1	Manifold Pressure Input, for Manifold Pressure Sensor
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Wideband Inputs on Nexus R3 VCU:

	[GY], C29, WBI 1 HEATER+	Internal Wideband	Wideband O2 1 Input, for Wideband O2 1 Sensor
	[Y], C30, WBI 1 INPUT		
	[R], C31, WBI 1 PUMP		
	[B], C32, WBI 1 NERNST		
	[W], C33, WBI 1 HEATER-		
	[G], C34, WBI 1 CAL		

System References on Nexus R3 VCU:

	[O], C25	+5V Sensor Supply	5V Sensors
	[B/W], C26	Sensor GND	Sensor ground
	[O/W], C9	+8V Sensor Supply	8V Sensors
		+12V ECU Power	Battery (+ve)
		Battery Ground	Battery (-ve)
	[B], A10, POWER GROUND	Power GND Out	Power Ground Out
	[B], A11, POWER GROUND		

Do not directly connect any other devices to the ignition switch

	[P], A13	Ign SW Input	Ignition Switch
	[R/L], A26	Ign SW Power	Ignition Switch Power

Other Connections on Drive By Wire:

		Idle	Main Output, for Idle Control
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Vehicle Name: **Bad Wolf Turbo Mk2**
Product: **Haltech Nexus R3 VCU**

Buttons on Keypad 2x4 A (Main Keypad) :



Keypad-2x4 A Button 1 Enable / Disable, for Cruise Control



Keypad-2x4 A Button 2 Set / Coast / -, for Cruise Control



Keypad-2x4 A Button 3 Resume / Accel / +, for Cruise Control



Keypad-2x4 A Button 4 Hazard Lights Input, for Indicator Control



Keypad-2x4 A Button 5 Datalog Switch Input, for Datalogging Switch



Keypad-2x4 A Button 6 Thermofan 1 Override Input, for Thermofan 1



Keypad-2x4 A Button 7 Input, for Rotary Trim Module 1 (Boost Trim)



Keypad-2x4 A Button 8 Engine Bump Input 1, for Engine Bump

Channels:

Channel

Override Switch (GenCond1 Out) Override Switch, for Generic Output 1 (Secondary Circuits)

Channel

Kill Switch Input 1 (GenCond5 Out) Kill Switch Input 1, for Kill Switch

Channel





Cancel (GenCond6 Out) Cancel, for Cruise Control

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Vehicle Name: **Bad Wolf Turbo Mk2**

Product: **Haltech Nexus R3 VCU**

Analogue Voltage Inputs on PD16 Box A (Boot Power Distro) :

	[W], A20	PD16A AVI1	Park Light Input, for Headlight Control
	[W/Y], A21	PD16A AVI2	Head Light Input, for Headlight Control
	[W/GY], A27	PD16A AVI3	Left Indicator Input, for Indicator Control
	[W/V], A28	PD16A AVI4	Right Indicator Input, for Indicator Control











Sync Pulsed Inputs on PD16 Box A (Boot Power Distro) :

	[GY/BR], A14	PD16A SPI1	Override Switch, for Generic Output 5 (Heater)
	[GY/R], A15	PD16A SPI2	Start Button Input, for Engine Starter Control Function
	[GY/O], A16	PD16A SPI3	Override Switch, for Generic Output 2 (Wipers)
	[GY/Y], A19	PD16A SPI4	Override Switch, for Generic Output 3 (Fog Lamps)

Half Bridge Outputs on PD16 Box A (Boot Power Distro) :

	[BR/Y], A1	PD16A HBO1	Oil Pressure Light, for Oil Pressure Light
	[BR/L], A2	PD16A HBO2	Battery Light Output, for Battery Voltage Light

8A High Current Outputs on PD16 Box A (Boot Power Distro) :





	[P/R], A3	PD16A 8A-HCO1	Left Indicator Output, for Indicator Control
	[P/BR], A4	PD16A 8A-HCO2	Output 2, for Generic Output 10 (Speed & USB)
	[P/B], A5	PD16A 8A-HCO3	Output 1, for Generic Output 1 (Secondary Circuits)
	[P/O], A6	PD16A 8A-HCO4	Output 1, for Generic Output 5 (Heater)
	[P/Y], A7	PD16A 8A-HCO5	Output 2, for Generic Output 1 (Secondary Circuits)
	[P/G], A8	PD16A 8A-HCO6	Alternator Control Output, for Alternator Control
	[P/V], A9	PD16A 8A-HCO7	Starter Motor Relay Output, for Engine Starter Control Function
	[P/L], A10	PD16A 8A-HCO8	Right Indicator Output, for Indicator Control
	[P/GY], A17	PD16A 8A-HCO9	Brake Light Output, for Brake light Control
	[P/W], A18	PD16A 8A-HCO10	Park Lights Output, for Headlight Control

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Vehicle Name: **Bad Wolf Turbo Mk2**

Product: **Haltech Nexus R3 VCU**







25A High Current Outputs on PD16 Box A (Boot Power Distro) :

	[R/L], E1	PD16A 25A-HCO1	Head Lights Output, for Headlight Control
	[R/Y], E2	PD16A 25A-HCO2	Output 1, for Generic Output 2 (Wipers)
	[R/O], E3	PD16A 25A-HCO3	Output 1, for Generic Output 3 (Fog Lamps)
	[R/G], E4	PD16A 25A-HCO4	Output 1, for Generic Output 6 (Stereo system)

System References on PD16 Box A (Boot Power Distro) :

		PD16A +12V Power	Battery (+ve)
	[O], A12	PD16A Sensor 5V	Sensor 5V
	[B/W], A11	PD16A Sensor GND	Sensor ground
	[B], A31, POWER GROUND	PD16A Power GND In	Power ground
	[B], A32, POWER GROUND		
	[B], A33, POWER GROUND		
	[B], A34, POWER GROUND		

Do not directly connect any other devices to the ignition switch

	[P], A13	PD16A Ign SW Input	Ignition Switch Input
	[R/L], A26	PD16A Ign SW Power	Ignition Switch Power
	[W], A23	PD16A CAN High	CAN High
	[L], A24	PD16A CAN Low	CAN Low
	[P], A25	PD16A CAN Power	CAN Power
	[B], A22	PD16A CAN Ground	CAN Ground

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Vehicle Name: **Bad Wolf Turbo Mk2**

Product: **Haltech Nexus R3 VCU**