2012 Volkswagen Passat

Wiring Information

Item	Wire Color	Polarity	Wire Location
12 Volts	red (40A)	+	VESCM, black 52 pin plug, pin 1
Second 12 Volts	red/yellow (40A)	+	VESCM, brown 52 pin plug, pin 42
Starter	red/black	+	VESCM, brown 52 pin plug, pin 14
Second Starter	pur/yel (sw1), pur/blk (sw2) (push-button start)	- resistor	start system button, 4 pin plug, pins 3 and 4
Ignition	black	+	VESCM, brown 52 pin plug, pin 31
Second Ignition	red/blue (some models only)	+	VESCM, white 52 pin plug, pin 14
Third Ignition	N/A		
Accessory	black/purple (for accessory sense only)	+	VESCM, white 52 pin plug, pin 28
Second Accessory	N/A		
Third Accessory	N/A		
Key Sense	purple/red (some models only)	+	VESCM, brown 52 pin plug, pin 13
Data Bus	N/A		
Can Bus High	orange/green	data	VESCM, brown 52 pin plug, pin 15
Can Bus Low	orange/brown	data	VESCM, brown 52 pin plug, pin 16
Can Bus Sw	N/A		
Power Lock	brown/green	-	Driver Door Module, 32 pin plug, pin 32
Power Unlock	same as power lock	- 180 ohms	
Lock Motor	blue/green	5 wire	VESCM, white 52 pin plug, pin 7
Unlock Motor	purple	5 wire	Driver Door Module, 20 pin plug, pin 12
Disarm Defeat	brown/yellow	5 wire	VESCM, white 52 pin plug, pin 8
Parking Lights (+)	gray/yellow	+	VESCM, black 52 pin plug, pin 19
Parking Lights (-)	N/A		
Hazards	brown/red	-	VESCM, brown 52 pin plug, pin 7
Turn Signal (Left)	gray/white (F); black/white (R)	+	VESCM, black 52 pin plug, pin 10; brown 52 pin plug, pin 51
Turn Signal (Right)	gray/brown (F); black/red (R)	+	VESCM, brown 52 pin plug, pin 50; black 52 pin plug, pin 9

Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Headlight	white/black	+	VESCM, black 52 pin plug, pin 22
AutoLights	purple (interrupt to turn off autolights)	+	VESCM, black 52 pin plug, pin 20
Reverse Light	blue/purple	+	VESCM, black 52 pin plug, pin 28
Left Front Door Trigger	brown/yellow	-	Driver Door Module, 20 pin plug, pin 7
Right Front Door Trigger	brown/yellow	-	Passenger Door Module, 20 pin plug, pin 7
Left Rear Door Trigger	black/gray	-	VESCM, black 52 pin plug, pin 41
Right Rear Door Trigger	black/green	-	VESCM, black 52 pin plug, pin 30
Dome Supervision	red/white	-	VESCM, brown 52 pin plug, pin 10
Trunk/Hatch Pin	brown/blue or brown/black	-	VESCM, black 52 pin plug, pin 29
Rear Glass Pin	N/A		
Hood Pin	brown/green	-	VESCM, black 52 pin plug, pin 14
Trunk Hatch/Release	purple (rear handle switch)	-	VESCM, black 52 pin plug, pin 13
Trunk Release Motor	red/blue	5 wire	VESCM, white 52 pin plug, pin 11
Fuel Door Release	locks/unlocks along with doors		
Power Sliding Door (Left)	N/A		
Power Sliding Door (Right)	N/A		
Factory Alarm Arm	green/white (driver door key lock)	-	Driver Door Module, 20 pin plug, pin 16
Factory Alarm Disarm	same as factory alarm arm	- 180 ohms	
Disarm No Unlock	Transponder and ignition		
Trunk Alarm Shunt	N/A		
Tachometer	purple/stripe (2.5L), brown/stripe (3.6L, 2.0L)	ac	any fuel injector, 2 pin plug, pin 2
Wait to Start	N/A		
Neutral Safety	N/A		
Clutch Pedal	purple/white	-	VESCM, brown 52 pin plug, pin 30
Fuel Pump	red/white (2.5L), blue/red (2.0L diesel)	+	fuel pump relay on upper VESCM
Rear Defroster	black/green	- latched	VESCM, white 52 pin plug, pin 22
Mirror Defroster	yellow	-	Driver Door Module, 32 pin plug, pin 28
Left Front Heated Seat	(CAN and LIN bus)		
Right Front Heated Seat	(CAN and LIN bus)		

Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Speed Sense	(wheel speed sensor)		
Brake Wire	black/red (functions with ignition on only)	+	VESCM, brown 52 pin plug, pin 17
Parking Brake	brown/yellow	-	parking brake switch, 2 pin plug, pin 1
Horn Trigger	red/brown	-	VESCM, white 52 pin plug, pin 41
Wipers	white/red	-	VESCM, white 52 pin plug, pin 23
Left Front Window (Up/Down)	use factory alarm arm/disarm		
Right Front Window (Up/Down)	see left front window		
Left Rear Window (Up/Down)	see left front window		
Right Rear Window (Up/Down)	see left front window		
Sun Roof (Open/Close)	white/purple (tilt up/down) (func w/ign on only)	- resistor	sunroof switch, 4 pin plug, pin 4
Sun Roof (Limit/Close)	N/A		
Memory Seat 1	red/black	- resistor	memory switch or Driver Seat Module, 32 pin plug, pin 12
Memory Seat 2	same as memory seat 1	- resistor	
Memory Seat 3	yellow/black	- resistor	memory switch or Driver Seat Module, 32 pin plug, pin 28
Radio 12V	red/yellow	+	radio, 16 pin plug, pins 15 and 16
Radio Ground	brown	-	radio, 16 pin plug, pin 12
Radio Ignition	(Infotainment CAN)		
Radio Illumination	(Infotainment CAN)		
Factory Amp Turn-on	(Infotainment CAN)		
Power Antenna	N/A		
Left Front Speaker (+/-)	brown/green - brown/blue or green - brown	+,-	radio, 8 pin plug, pins 3 and 7
Right Front Speaker (+/-)	brown/red - brown/black or blue - brown	+,-	radio, 8 pin plug, pins 2 and 6
Left Rear Speaker (+/-)	red/white - brown/white or white - brown	+,-	radio, 8 pin plug, pins 4 and 8
Right Rear Speaker (+/-)	red/purple - brown/purple or yellow - brown	+,-	radio, 8 pin plug, pins 1 and 5
Center Channel (+/-)	N/A		
Subwoofer (+/-)	white/red - brown/red (1); gray/red - gray/brn (2)	+,-	amplifier, 38 pin plug, pins 16 and 4; 5 and 17
Aux. Audio Input Left (+/-)	yellow - green	+,-	radio, 12 pin plug, pins 1 and 2
Aux. Audio Input Right (+/-)	gray - green	+,-	radio, 12 pin plug, pins 7 and 2
RSE Video (+/-)	N/A		
RSE Audio Left (+/-)	N/A		
RSE Audio Right (+/-)	N/A		

Satellite Radio 12 Volts	N/A		
Satellite Radio Ground	N/A		
Satellite Radio Ignition	N/A		
Satellite Radio Antenna	N/A		
Satellite Audio Left (+/-)	N/A		
Satellite Audio Right (+/-)	N/A		

What Fits

Item	Size	Depth	Location
Headunit	irregular		
Left Front Speaker	6.5	3.5	left front door
Left Front Tweeter	1	1	left front dash
Right Front Speaker	6.5	3.5	right front door
Right Front Tweeter	1	1	right front dash
Left Rear Speaker	6.5	3.5	left rear door
Left Rear Tweeter	1	1	left rear door
Right Rear Speaker	6.5	3.5	right rear door
Right Rear Tweeter	1	1	right rear door
Center Channel	N/A		
Subwoofer			under rear deck
Left Front Headrest			
Right Front Headrest			
Left Right Headrest			
Right Rear Headrest			
Satellite Radio Tuner	(built into radio)		

Additional Wiring Notes

Item	Note
Key Sense	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Accessory	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
12 Volts	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Second 12 Volts	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Wipers	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Turn Signal (Left)	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Turn Signal (Right)	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Parking Lights (+)	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Headlight	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
AutoLights	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Reverse Light	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Trunk Hatch/Release	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Trunk/Hatch Pin	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Trunk Release Motor	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Brake Wire	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Starter	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Ignition	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Hood Pin	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Rear Defroster	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Horn Trigger	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Dome Supervision	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Hazards	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Can Bus High	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Can Bus Low	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Fuel Pump	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash. On 3.6L models, it is black/green (+) in the driver kick, harness to rear.
Clutch Pedal	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Left Front Speaker (+/-)	If equipped, the amplifier is under the driver seat. On vehicles with amplifier, the speaker wires are brown/green - brown/blue (woofer); blue/black - white/black (midrange); white - white/black (tweeter) at the amplifier, 38 pin plug, pins 18 and 6; 13 and 14; 8 and 20.
Right Front Speaker (+/-)	If equipped, the amplifier is under the driver seat. On vehicles with amplifier, the speaker wires are brown/red - brown/black (woofer); red/gray - brown/gray (midrange); gray - gray/black (tweeter) at the amplifier, 38 pin plug, pins 15 and 3; 12 and 11; 19 and 7.
Subwoofer (+/-)	If equipped, the amplifier is under the driver seat.
Left Rear Speaker (+/-)	If equipped, the amplifier is under the driver seat. On vehicles with amplifier, the speaker wires are red/white - brown/white at the amplifier, 38 pin plug, pins 9 and 21.
Right Rear Speaker (+/-)	If equipped, the amplifier is under the driver seat. On vehicles with amplifier, the speaker wires are red/purple - brown/purple at the amplifier, 38 pin plug, pins 22 and 10.
Second Ignition	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Left Rear Door Trigger	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Right Rear Door Trigger	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Lock Motor	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.
Passenger Unlock Motor	The VESCM (Vehicle Electrical System Control Module) is the relay box under the driver dash.