2021 Dodge/Ram Challenger(SmartKey) - Requested by: ampire.de

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Wiring Information

Item	Wire Color	Polarity	Wire Location
12 Volts	Violet/Red (40A)	+	BCM above passenger kick, black 4 pin plug (B), pin 3
Ground	(chassis ground)		
Starter Kill	Lt. Blue/Tan	+	BCM above passenger kick, black 24 pin plug (A), pin 19
Ignition	Pink/White	+	BCM above passenger kick, black 48 pin plug (E), pin 27
PTS 1	Violet/Lt. Blue	+	Keyless Ignition Node (Start Stop Button), black 6 pin plug, pin 4
CAN Bus High	White/Green (CAN C)	Data	Green CAN Junction Block behind glove box, white 3 pin plug, pin 1
CAN Bus Low	White/Blue (CAN C)	Data	Green CAN Junction Block behind glove box, white 3 pin plug, pin 2
CAN Bus High 2	White/Green (CAN IHS)	Data	White CAN Junction Block under driver dash, green 3 pin plug, pin 1
CAN Bus Low 2	White (CAN IHS)	Data	White CAN Junction Block under driver dash, green 3 pin plug, pin 2
CAN Bus High 3	Tan (DIAG CAN)	Data	OBD-Data Link Connector, black 16 pin plug, pin 6
CAN Bus Low 3	Yellow (DIAG CAN)	Data	OBD-Data Link Connector, black 16 pin plug, pin 14
OBD 12 Volts	Red/Gray (10A)	+	OBD-Data Link Connector, black 16 pin plug, pin 16
OBD Ground	Black	-	OBD-Data Link Connector, black 16 pin plug, pin 4
OBD Connector	Black		Under Driver Dash, Near Hood Release
IMMO Data	White/Lt. Green	Data	Keyless Ignition Node (Start Stop Button), black 6 pin plug, pin 5
Power Lock	Violet/Lt. Green (passenger switch)	- 330 Ohms	Passenger Window-Door Lock Switch, green 10 pin plug, pin 8
Power Unlock	(same as power lock)	- 100 Ohms	

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Item	Wire Color	Polarity	Wire Location
Lock Motor	Lt. Green/Dk. Green	Reverse	BCM above passenger kick, white 48 pin plug (F), pin 2
Driver Unlock Motor	Tan/Lt. Green	Reverse	BCM above passenger kick, white 48 pin plug (F), pin 1
Passenger Unlock Motor	Violet/Lt. Green	Reverse	BCM above passenger kick, white 48 pin plug (F), pin 3
Factory Alarm Arm	(arms on lock with door open)		
Factory Alarm Disarm	(proximity key and push button)		
Parking Lights	White/Brown (LF); White/Lt. Blue (RF)	+	BCM above passenger kick, white 24 pin plug (D), pin 1 (LF); black 24 pin plug (A), pin 2 (RF)
Parking Lights 2	White/Gray (LR); White/Orange (RR)	+	BCM above passenger kick, white 48 pin plug (F), pin 32 (LR); black 48 pin plug (E), pin 4 (RR)
Parking Lights -	White/Brown (see Tech Doc 1082)	- 1130 Ohms	Headlight Switch, black 6 pin plug, pin 3
Parking Lights MUX	White/Brown	MUX	Headlight Switch, black 6 pin plug, pin 3
Hazards	White/Dk. Blue	-	BCM above passenger kick, blue 24 pin plug (G), pin 21
Turn Signal (Left)	White/Gray (LF); White/Dk. Green (LR)	+	BCM above passenger kick, white 24 pin plug (D), pin 14 (LF); black 48 pin plug (E), pin 3 (LR)
Turn Signal (Right)	White/Gray (RF); White/Yellow (RR)	+	BCM above passenger kick, black 24 pin plug (A), pin 13 (RF); white 48 pin plug (F), pin 42 (RR)
Headlight	White/Brown (relay isolate from switch)	- 660 Ohms	Headlight Switch, black 6 pin plug, pin 3
Headlight 2	White/Brown (alternate location)	- 660 Ohms	BCM above passenger kick, blue 24 pin plug (G), pin 20
AutoLights	White/Brown (relay isolate from switch)	- 2000 Ohms (Off)	Headlight Switch, black 6 pin plug, pin 3
AutoLights 2	White/Brown (alternate location)	- 2000 Ohms (Off)	BCM above passenger kick, blue 24 pin plug (G), pin 20
Reverse Light	White/Tan	+	BCM above passenger kick, white 48 pin plug (F), pin 41
Left Front Door Trigger	Violet	-	BCM above passenger kick, white 48 pin plug (F), pin 9

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Item	Wire Color	Polarity	Wire Location
Right Front Door Trigger	Violet/White	-	BCM above passenger kick, white 48 pin plug (F), pin 23
Dome Light	Yellow/Violet	+	BCM above passenger kick, blue 24 pin plug (G), pin 14
Trunk/Hatch Pin	Violet/Orange	-	BCM above passenger kick, white 48 pin plug (F), pin 26
Hood Pin	Violet/Lt. Blue	-	BCM above passenger kick, black 24 pin plug (A), pin 11
Trunk/Hatch Release	Lt. Green/White	- 560 Ohms	BCM above passenger kick, blue 24 pin plug (G), pin 8
Trunk Release Motor	Tan/Yellow	Reverse	BCM above passenger kick, white 48 pin plug (F), pin 4
Tachometer	Dk. Blue/Gray (3.6L)	AC	Camshaft Position Sensor, engine passenger side rear, black 4 pin plug, pin 4
Tachometer 2	Dk. Blue/Gray (5.7L, 6.2L, 6.4L)	AC	Camshaft Position Sensor, engine passenger side front, black 3 pin plug, pin 3
Clutch Pedal	Yellow/Orange (interlock); Dk. Green/Orange (upstop)	Tech Doc 10000	Clutch Switch on clutch master cylinder, gray 3 pin plug, pin 2 (interlock); pin 1 (upstop)
Fuel Pump	Dk. Blue/Orange	+	Fuel Pump Module under rear seat, black 5 pin plug, pin 5 (3.6L, 5.7L, 6.4L); gray 6 pin plug, pins 5, 6 (6.2L)
Rear Defroster	Dk. Blue/White	+ Latched	A/C Heater Module behind glove box, white 24 pin plug, pin 18
Mirror Defroster	(CAN IHS)		
Left Front Heated Seat	(CAN IHS)		
Right Front Heated Seat	(CAN IHS)		
Speed Sense	(wheel speed sensor)		
Brake Wire	Dk. Green/White	+	BCM above passenger kick, white 24 pin plug (D), pin 18
Parking Brake	Dk. Green/White	-	BCM above passenger kick, black 48 pin plug (E), pin 11

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Item	Wire Color	Polarity	Wire Location
Horn Trigger	Dk. Green/White	+	BCM above passenger kick, black 24 pin plug (A), pin 23
Wipers	Brown/White	+	BCM above passenger kick, black 24 pin plug (A), pin 12
Left Front Window (Up/Down)	(not recommended because of auto window drop down)		
Right Front Window (Up/Down)	(not recommended because of auto window drop down)		
Sun Roof (Open/Close)	Orange/Tan - Orange/Lt. Blue (function with ignition on only)	+	Above Driver Kick, gray 24 pin plug, pins 16 - 4
Radio 12V	Red/White	+	Radio, black 52 pin plug, pin 44
Radio Ground	Black	-	Radio, black 52 pin plug, pin 43
Radio Ignition	Pink/Dk. Green (delayed accessory)	+	Cigar Lighter, gray 3 pin plug, pin 1
Factory Amp Turn-on	(CAN IHS)		
Left Front Speaker (+/-)	Gray/Violet - Gray/Yellow	+,-	Radio, black 52 pin plug, pins 47 - 51
Right Front Speaker (+/-)	Dk. Green/Violet - Dk. Green/Yellow	+,-	Radio, black 52 pin plug, pins 46 - 50
Left Rear Speaker (+/-)	Dk. Green/Tan - Dk. Green/Gray	+,-	Radio, black 52 pin plug, pins 48 - 52
Right Rear Speaker (+/-)	Dk. Green/Brown - Yellow/Gray	+,-	Radio, black 52 pin plug, pins 45 - 49
Left Front Speaker - With Amp	Gray/Violet - Gray/Yellow	+,-	Amplifier above driver kick, black 16 pin plug, pins 8 - 16 or white 22 pin plug, pins 22 - 21
Right Front Speaker - With Amp	Dk. Green/Violet - Dk. Green/Yellow	+,-	Amplifier above driver kick, black 16 pin plug, pins 7 - 15 or white 22 pin plug, pins 10 - 11
Left Front Tweeter - With Amp	Gray/Orange - Gray/Yellow	+,-	Amplifier above driver kick, white 22 pin plug, pins 20 - 9 or pins 6 - 7
Right Front Tweeter - With Amp	Gray/Dk. Green - Gray/Lt. Green	+,-	Amplifier above driver kick, white 22 pin plug, pins 19 - 8 or pins 9 - 8
Left Rear Speaker - With Amp	Dk. Green/Tan - Dk. Green/Gray	+,-	Amplifier above driver kick, black 16 pin plug, pins 14 - 6 or gray 22 pin plug, pins 22 - 21
Right Rear Speaker - With Amp	Dk. Green/Brown - Yellow/Gray	+,-	Amplifier above driver kick, black 16 pin plug, pins 3 - 11 or white 22 pin plug, pins 5 - 4

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Item	Wire Color	Polarity	Wire Location
Left Rear Tweeter - With Amp	Dk. Green/Dk. Blue - Dk. Green/Tan	+,-	Amplifier above driver kick, black 16 pin plug, pins 13 - 5 or white 22 pin plug, pins 2 - 3
Right Rear Tweeter - With Amp	Gray/Dk. Blue - Gray/Tan	+,-	Amplifier above driver kick, black 16 pin plug, pins 4 - 12 or white 22 pin plug, pins 15 - 16
Center Channel - With Amp	Gray/Brown - Gray/Orange	+,-	Amplifier above driver kick, white 22 pin plug, pins 10 - 21 or 19 - 20
Subwoofer - With Amp	Gray/Brown - Dk. Green/Orange (coil 1); Gray/White - Dk. Green/White (coil 2)	+,-	Amplifier above driver kick, black 16 pin plug, pins 10 - 2 (coil 1); pins 9 - 1 (coil 2)
Subwoofer - With Amp 2	Gray/Brown - Dk. Green/Orange (coil 1); Gray/White - Dk. Green/White (coil 2)	+,-	Amplifier above driver kick, white 22 pin plug, pins 18 - 17 (coil 1); pins 14 - 13 (coil 2) (premium 3)
Aux. Audio Input Left (+/-)	Lt. Green/Tan - Lt. Green/Dk. Blue	+,-	Radio, black 52 pin plug, pins 16 - 7
Aux. Audio Input Right (+/-)	Lt. Green/Lt. Blue - Lt. Green/Dk. Blue	+,-	Radio, black 52 pin plug, pins 6 - 7
Rearview Camera Video	Dk. Green/Brown - Dk. Green/Orange	+,-	Radio, black 52 pin plug, pins 31 - 32

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What Fits

Item	Size	Depth	Location
Headunit	Irregular		Center of Dash
Left Front Speaker	6 x 9		Left Front Door
Left Front Tweeter	3.5		Left Front Dash
Right Front Speaker	6 x 9		Right Front Door
Right Front Tweeter	3.5		Right Front Dash
Left Rear Speaker	6.5 or 3.5		Left Rear Shelf
Left Rear Tweeter	3.5		Left Rear Side Panel
Right Rear Speaker	6.5 or 3.5		Right Rear Shelf
Right Rear Tweeter	3.5		Right Rear Side Panel
Center Channel	3.5		Top Center of Dash
Subwoofer	8 or 10		Center of Rear Shelf or Spare Tire Well of Trunk