

# DirectWire

2025 Jeep Grand Cherokee (Smart Key) - North America - Requested by ampire.de

## Wiring Information

Item	Wire Color	Polarity	Wire Location
12 Volts	Red (40A)	+	BCM in passenger kick, gray 2 pin plug (C), pin 2
Second 12 Volts	Red (80A)	+	Driver Kick, black 2 pin plug (XY315A), pin 1
Starter Kill	Yellow/Gray	+	Near PCM behind passenger headlight, black 40 pin plug (XY200A), pin 1
Starter	Brown/Tan	-	BCM in passenger kick, gray 40 pin plug (B), pin 15
Ignition	Pink/White	+	BCM in passenger kick, gray 32 pin plug (D), pin 13
PTS 1	Violet/Blue	+	Keyless Ignition Node (Start Stop Button), black 6 pin plug, pin 4
CAN Bus High	Dk. Blue/White (CAN IHS)	Data	BCM in passenger kick, black 52 pin plug (E), pin 47
CAN Bus Low	White (CAN IHS)	Data	BCM in passenger kick, black 52 pin plug (E), pin 46
CAN Bus High 2	Gray/Tan (CAN FD)	Data	BCM in passenger kick, black 22 pin plug (A), pin 11
CAN Bus Low 2	Tan (CAN FD)	Data	BCM in passenger kick, black 22 pin plug (A), pin 12
CAN Bus High 3	Dk. Blue/White (CAN IHS)	Data	Driver Kick, black 59 pin plug (XY301A), pin 26
CAN Bus Low 3	White (CAN IHS)	Data	Driver Kick, black 59 pin plug (XY301A), pin 25
CAN Bus High 4	Gray/Tan (CAN FD)	Data	Above Driver Kick, black 59 pin plug (XY311A), pin 13

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CAN Bus Low 4	Tan (CAN FD)	Data	Above Driver Kick, black 59 pin plug (XY311A), pin 16
CAN Bus High 5	Dk. Green/Tan (DIAG CAN)	Data	OBD-Data Link Connector, black 16 pin plug, pin 6
CAN Bus Low 5	Tan (DIAG CAN)	Data	OBD-Data Link Connector, black 16 pin plug, pin 14
OBD 12 Volts	Gray/Red (10A)	+	OBD-Data Link Connector, black 16 pin plug, pin 16
OBD Ground	Black/Orange	-	OBD-Data Link Connector, black 16 pin plug, pin 4
IMMO Data	White/Green	Data	Keyless Ignition Node (Start Stop Button), black 6 pin plug, pin 5
PKE Module 12 Volts	Red/Blue (7.5A)	+	Radio Freq Hub Module in center rear of headliner, black 24 pin plug, pin 16
PKE Module Ground	Black	-	Radio Freq Hub Module in center rear of headliner, black 24 pin plug, pin 18
PKE Module Ignition	Pink/White	+	Radio Freq Hub Module in center rear of headliner, black 24 pin plug, pin 7
PKE Module PTS	Violet/Blue	+	Radio Freq Hub Module in center rear of headliner, black 24 pin plug, pin 20
Driver LF Antenna	Gray	RF	Left Rear Door Harness, black 21 pin plug (XY701A), pin 12
Driver LF Antenna 2	Gray	RF	Radio Freq Hub Module in center rear of headliner, gray 24 pin plug, pin 16
Driver Door Handle Switch	Green/Yellow	-	Driver Door Harness, brown 17 pin plug (XY601D), pin 5
Driver Door Handle Switch 2	Green/Yellow	-	Radio Freq Hub Module in center rear of headliner, gray 24 pin plug, pin 5
Passenger LF Antenna	Gray/Orange	RF	Right Rear Door Harness, gray 21 pin plug (XY700B), pin 12
Passenger LF Antenna 2	Gray/Orange	RF	Radio Freq Hub Module in center rear of headliner, gray 24 pin plug, pin 8

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Passenger Door Handle Switch	Green/Orange	-	Passenger Door Harness, brown 17 pin plug (XY600D), pin 2
Passenger Door Handle Switch 2	Green/Orange	-	Radio Freq Hub Module in center rear of headliner, gray 24 pin plug, pin 4
Left Rear Door Handle Switch	Green/Brown	-	Left Rear Door Harness, gray 21 pin plug (XY701B), pin 2
Left Rear Door Handle Switch 2	Green/Brown	-	Radio Freq Hub Module in center rear of headliner, gray 24 pin plug, pin 3
Right Rear Door Handle Switch	Green/Gray	-	Right Rear Door Harness, gray 21 pin plug (XY700B), pin 2
Right Rear Door Handle Switch 2	Green/Gray	-	Radio Freq Hub Module in center rear of headliner, gray 24 pin plug, pin 2
Rear LF Antenna	Gray/Dk. Green	RF	Rear Cargo Floor, harness to rear bumper
Rear LF Antenna 2	Gray/Dk. Green	RF	Radio Freq Hub Module in center rear of headliner, gray 24 pin plug, pin 6
Rear Handle Switch	Green/White	-	Passenger Kick, harness to rear
Rear Handle Switch 2	Green/White	-	BCM in passenger kick, gray 32 pin plug (D), pin 7
Lock Motor	Green/Orange (LF); Green/Violet (RF-LR-RR)	Reverse	BCM in passenger kick, black 40 pin plug (F), pin 39 (LF); black 52 pin plug (E), pin 23 (RF-LR-RR)
Driver Unlock Motor	Tan/Dk. Green	Reverse	BCM in passenger kick, black 52 pin plug (E), pin 22
Passenger Unlock Motor	Tan/White (RF); Tan/Orange (LR); Tan/Blue (RR)	Reverse	BCM in passenger kick, black 40 pin plug (F), pin 40 (RF); gray 32 pin plug (D), pin 10 (LR); black 52 pin plug (E), pin 21 (RR)
Lock Detection	Green/Yellow	-	Driver Kick, door harness, white 17 pin plug (XY601), pin 10 --or-- BCM in passenger kick, black 40 pin plug (F), pin 36

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Parking Lights	White/Gray (LR); White/Orange (RR)	+	BCM in passenger kick, black 40 pin plug (F), pin 29 (LR); gray 32 pin plug (D), pin 4 (RR)
Parking Lights 2	White/Blue (LF); White/Dk. Blue (RF) (side markers)	+	Left Headlight, black 16 pin plug, pin 2 (LF); Right Headlight, black 16 pin plug, pin 2 (RF)
Parking Lights -	White/Brown (see Tech Doc 1082)	- 1130 Ohms	Headlight Switch, black 10 pin plug, pin 1
Parking Lights NEG 2	White/Brown (alternate location)	- 1130 Ohms	BCM in passenger kick, blue 52 pin plug (G), pin 22
Parking Lights MUX	White/Brown	MUX	Headlight Switch, black 10 pin plug, pin 1
Parking Lights MUX 2	White/Brown (alternate location)	MUX	BCM in passenger kick, blue 52 pin plug (G), pin 22
Hazards	White/Dk. Blue	-	BCM in passenger kick, blue 52 pin plug (G), pin 41
Hazards 2	White/Dk. Blue (alternate location)	-	Hazard Switch, black 4 pin plug, pin 4
Turn Signal (Left)	Dk. Green/White (LF); Yellow (LR)	+	BCM in passenger kick, gray 40 pin plug (B), pin 32 (LF); black 52 pin plug (E), pin 36 (LR)
Turn Signal (Right)	Brown/White (RF); Green (RR)	+	BCM in passenger kick, gray 40 pin plug (B), pin 31 (RF); black 40 pin plug (F), pin 30 (RR)
Headlight	White/Brown (relay isolate from switch)	- 660 Ohms	Headlight Switch, black 10 pin plug, pin 1
Headlight 2	White/Brown (alternate location)	- 660 Ohms	BCM in passenger kick, blue 52 pin plug (G), pin 22
AutoLights	White/Brown (relay isolate from switch)	- 2000 Ohms (Off)	Headlight Switch, black 10 pin plug, pin 1
AutoLights 2	White/Brown (alternate location)	- 2000 Ohms (Off)	BCM in passenger kick, blue 52 pin plug (G), pin 22

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Reverse Light	White/Tan	+	BCM in passenger kick, black 40 pin plug (F), pin 28
Left Front Door Trigger	Violet	-	BCM in passenger kick, black 52 pin plug (E), pin 9
Left Front Door Trigger 2	Violet (alternate location)	-	Driver Kick, door harness, brown 17 pin plug (XY601), pin 6
Right Front Door Trigger	Violet/White	-	BCM in passenger kick, gray 32 pin plug (D), 21
Left Rear Door Trigger	Violet/Gray	-	BCM in passenger kick, gray 32 pin plug (D), 20
Right Rear Door Trigger	Violet/Yellow	-	BCM in passenger kick, black 52 pin plug (E), pin 30
Dome Light	Yellow/Violet	+	BCM in passenger kick, black 40 pin plug (F), pin 17
Trunk/Hatch Pin	Violet/Orange	-	BCM in passenger kick, black 52 pin plug (E), pin 7
Hood Pin	Violet/Blue	-	BCM in passenger kick, gray 40 pin plug (B), pin 24
Power Liftgate 2	Violet (close)	-	Rear Power Liftgate Switch, white 6 pin plug, pin 1
Trunk/Hatch Release	Green/White (rear handle switch)	-	BCM in passenger kick, gray 32 pin plug (D), pin 7
Trunk Release Motor	Tan/Yellow (w/o power liftgate)	Reverse	BCM in passenger kick, black 52 pin plug (E), pin 40
Fuel Door Release	Tan/Violet - Green/Violet (lock-unlock motor) (export models)	Reverse	BCM in passenger kick, black 52 pin plug (E), pins 15 - 16
Tachometer	Dk. Blue/Gray (CMP) (3.6L)	AC	Engine Driver Side Rear, black 34 pin plug (XY221A), pin 30
Tachometer 2	Dk. Blue/Gray (5.7L)	AC	Camshaft Position Sensor, engine passenger side front, black 3 pin plug, pin 3

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Tachometer 3	Brown/Green (with ANC)	AC	Above Driver Kick, black 59 pin plug (XY311A), pin 2
Fuel Pump	Dk. Blue/Orange	+	Engine Compartment Passenger Side Rear, black 40 pin plug (XY810A), pin 11
Rear Defroster	Brown/Violet	+ Latched	BCM in passenger kick, gray 40 pin plug (B), pin 6
Wiper Deicer	Dk. Blue	+ Latched	BCM in passenger kick, gray 40 pin plug (B), pin 7
Speed Sense	Dk. Green/Green (export models)	AC	Above Driver Kick, black 59 pin plug (XY311A), pin 50
Speed Sense 2	Dk. Green/White (with dual pane sunroof)	AC	BCM in passenger kick, blue 52 pin plug (G), pin 7
Brake Wire	Dk. Green/White	+	Brake Provision Connector in driver kick, gray 4 pin plug, pin 2
Brake Wire 2	Dk. Green/White (alternate location)	+	BCM in passenger kick, gray 32 pin plug (D), pin 28
Brake Wire 3	Dk. Green/White (alternate location)	+	Above Driver Kick, black 24 pin plug (XY231A), pin 11
Horn Trigger	Dk. Green/Violet	-	BCM in passenger kick, blue 52 pin plug (G), pin 42
Horn Trigger 2	Dk. Green/Violet (alternate location)	-	Steering Column Module, black 16 pin plug, pin 13
Horn - Factory Alarm	Dk. Green/White	+	BCM in passenger kick, gray 40 pin plug (B), pin 20
Wipers	Brown/Blue	+	BCM in passenger kick, black 22 pin plug (A), pin 21
Left Front Window (Up/Down)	Orange/Green - Orange/White	A	Driver Door Module, black 5 pin plug, pins 1 - 5
Right Front Window (Up/Down)	Orange/Brown - Orange/Violet	A	Passenger Door Module, black 5 pin plug, pins 1 - 5

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Sun Roof (Open/Close)	Orange/Tan - Orange/Blue (function with ignition on only)	-	Over Head Console Module, black 20 pin plug, pins 5 - 14
Sun Roof (Limit/Close)	Orange/Yellow (vent) (functions with ignition on only)	-	Over Head Console Module, black 20 pin plug, pin 6
Memory Seat 1	Violet/Brown	MUX	Driver Door Module, blue 10 pin plug, pin 8 --or-- Memory Switch, black 4 pin plug, pin 1
Radio 12V	Red	+	Radio, green 12 pin plug, pin 10
Radio Ground	Black	-	Radio, green 12 pin plug, pin 11
Radio Ignition	Pink/Yellow	+	Cigar Lighter, gray 3 pin plug, pin 1
Radio Illumination	Orange/Gray (dimmer)	+	Cigar Lighter, gray 3 pin plug, pin 2
Left Front Speaker (+/-)	Dk. Green/Yellow - Dk. Green/Blue or Dk. Green - Dk. Green/Brown	+,-	Radio, green 12 pin plug, pins 6 - 5
Right Front Speaker (+/-)	Gray/Yellow - Gray/Blue or Gray - Gray/Brown	+,-	Radio, green 12 pin plug, pins 8 - 7
Left Front Tweeter (+/-)	Gray/Orange - Gray/Yellow (Premium 1)	+,-	Radio, blue 32 pin plug, pins 2 - 1
Right Front Tweeter (+/-)	Gray/Dk. Green - Gray/Green (Premium 1)	+,-	Radio, blue 32 pin plug, pins 4 - 3
Left Rear Speaker (+/-)	Dk. Green/Tan - Dk. Green/Gray or Dk. Green/Dk. Blue - Dk. Green/Orange	+,-	Radio, green 12 pin plug, pins 2 - 1
Right Rear Speaker (+/-)	Dk. Green/Brown - Yellow/Gray or Gray/Dk. Blue - Gray/Orange	+,-	Radio, green 12 pin plug, pins 4 - 3
Left Front Speaker - With Amp	Dk. Green/Yellow - Dk. Green/Blue	+,-	Amplifier in right rear quarter panel, behind insulator, gray 10 pin plug, pins 4 - 9 (Alpine)

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Right Front Speaker - With Amp	Gray/Yellow - Gray/Blue	+,-	Amplifier in right rear quarter panel, behind insulator, gray 10 pin plug, pins 5 - 10 (Alpine)
Left Front Tweeter - With Amp	Gray/Orange - Gray/Yellow	+,-	Amplifier in right rear quarter panel, behind insulator, gray 10 pin plug, pins 2 - 7 (Alpine)
Right Front Tweeter - With Amp	Gray/DK. Green - Gray/Green	+,-	Amplifier in right rear quarter panel, behind insulator, gray 10 pin plug, pins 3 - 8 (Alpine)
Left Rear Speaker - With Amp	Dk. Green/Tan - Dk. Green/Gray	+,-	Amplifier in right rear quarter panel, behind insulator, gray 22 pin plug, pins 4 - 15 (Alpine)
Right Rear Speaker - With Amp	Dk. Green/Brown - Yellow/Gray	+,-	Amplifier in right rear quarter panel, behind insulator, gray 22 pin plug, pins 5 - 16 (Alpine)
Left Rear Tweeter - With Amp	Gray/Green - Gray/Dk. Green	+,-	Amplifier in right rear quarter panel, behind insulator, gray 22 pin plug, pins 6 - 17 (Alpine)
Right Rear Tweeter - With Amp	Dk. Green/Green - Dk. Green/Gray	+,-	Amplifier in right rear quarter panel, behind insulator, gray 22 pin plug, pins 7 - 18 (Alpine)
Center Channel - With Amp	Gray/Brown - Gray/Orange	+,-	Amplifier in right rear quarter panel, behind insulator, gray 22 pin plug, pins 8 - 19 (Alpine)
Subwoofer - With Amp	Gray/Brown - Gray/Tan (coil 1); Gray/White - Dk. Green/White (coil 2)	+,-	Amplifier in right rear quarter panel, behind insulator, gray 22 pin plug, pins 10 - 21 (coil 1); pins 11 - 22 (coil 2) (Alpine)