**2020 Dodge/Ram 1500(SmartKey) - Requested by: ampire.de**

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### *Wiring Information*

| Item | Wire Color | Polarity | Wire Location |
|------|-----------|----------|---------------|
| 12 Volts | Violet/Red (40A) | + | BCM above driver kick, black-gray 4 pin plug (B), pin 3 |
| Ground | (chassis ground) | | |
| Starter Kill | Lt. Blue/Tan | + | BCM above driver kick, black 24 pin plug (A), pin 19 |
| Ignition Sense | Brown/Black | + | BCM above driver kick, black 48 pin plug (E), pin 27 |
| PTS 1 | Violet/Brown | + | Keyless Ignition Node (Start Stop Button), black 6 pin plug, pin 4 |
| Data Bus | (INTERFACE MODULE IS REQUIRED FOR REMOTE START) | | |
| CAN Bus High | White/Green (CAN C) | Data | Green CAN Junction Block behind headlight switch, white 3 pin plug, pin 1 |
| CAN Bus Low | White/Blue (CAN C) | Data | Green CAN Junction Block behind headlight switch, white 3 pin plug, pin 2 |
| CAN Bus High 2 | White/Gray (CAN IHS) | Data | White CAN Junction Block behind headlight switch, green 3 pin plug, pin 1 |
| CAN Bus Low 2 | White/Orange (CAN IHS) | Data | White CAN Junction Block behind headlight switch, 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 | Gray/Red (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, Left of Hood Release |
| IMMO Data | White/Green | Data | Keyless Ignition Node (Start Stop Button), black 6 pin plug, pin 5 |

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| Item | Wire Color | Polarity | Wire Location |
|------|-----------|----------|---------------|
| Security Light | Violet/Gray | | BCM above driver kick, blue-black 24 pin plug (G), pin 22 |
| Power Lock | Violet/Green | - 330 Ohms | Passenger Window-Door Lock Switch, green 10 pin plug, pin 8 |
| Power Unlock | (same as power lock) | - 100 Ohms | |
| Lock Motor | Green/Dk. Green | Reverse | BCM above driver kick, white 48 pin plug (F), pin 2 |
| Driver Unlock Motor | Tan/Green | Reverse | BCM above driver kick, white 48 pin plug (F), pin 1 |
| Passenger Unlock Motor | Violet/Green | Reverse | BCM above driver 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/Orange (RF) | + | BCM above driver kick, black 24 pin plug (A), pin 4 (LF); white 24 pin plug (D), pin 3 (RF) |
| Parking Lights 2 | White/Gray (LR); White/Orange (RR) | + | BCM above driver 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 10 pin plug, pin 1 |
| Parking Lights MUX | White/Brown | MUX | Headlight Switch, black 10 pin plug, pin 1 |
| Hazards | White/Dk. Blue | - | BCM above driver kick, blue-black 24 pin plug (G), pin 21 |
| Turn Signal (Left) | White/Green (LF); White/Dk. Green (LR) | + | BCM above driver kick, white 24 pin plug (D), pin 14 (LF); black 48 pin plug (E), pin 3 (LR) |
| Turn Signal (Right) | White/Tan (RF); White/Yellow (RR) | + | BCM above driver kick, black 24 pin plug (A), pin 13 (RF); white 48 pin plug (F), pin 42 (RR) |
| Headlight | White/Brown | - 660 Ohms | Headlight Switch, black 10 pin plug, pin 1 |
| AutoLights | White/Brown | - 2000 Ohms (Off) | Headlight Switch, black 10 pin plug, pin 1 |
| Reverse Light | White/Tan | + | BCM above driver kick, white 48 pin plug (F), pin 41 |

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| Item | Wire Color | Polarity | Wire Location |
|---|---|---|---|
| Left Front Door Trigger | Violet | - | BCM above driver kick, white 48 pin plug (F), pin 9 |
| Right Front Door Trigger | Violet/White | - | BCM above driver kick, white 48 pin plug (F), pin 23 |
| Left Rear Door Trigger | Violet/Gray | - | BCM above driver kick, blue-black 24 pin plug (G), pin 18 |
| Right Rear Door Trigger | Violet/Yellow | - | BCM above driver kick, black 48 pin plug (E), pin 5 |
| Dome Light | Yellow/Violet | + | BCM above driver kick, blue-black 24 pin plug (G), pin 14 |
| Trunk/Hatch Pin | Violet/Orange (tailgate) | - | BCM above driver kick, white 48 pin plug (F), pin 26 |
| Hood Pin | Violet/Blue | - | BCM above driver kick, black 24 pin plug (A), pin 11 |
| Trunk/Hatch Release | Green/White (tailgate handle switch) (except multifunction) | - | BCM above driver kick, white 48 pin plug (F), pin 8 |
| Trunk Release Motor | Tan/Yellow (tailgate) (except multifunction) | Reverse | BCM above driver kick, white 48 pin plug (F), pin 4 |
| Tachometer | Dk. Blue/Gray (3.6L, 5.7L) | AC | PCM to driver side of engine, black 96 pin plug, pin 85 |
| Tachometer 2 | Dk. Blue/Gray (5.7L) | AC | Camshaft Position Sensor, engine passenger side front, black 3 pin plug, pin 3 |
| Fuel Pump | Dk. Blue/Orange | + | Driver Kick, harness to rear |
| Rear Defroster | Dk. Blue | + Latched | Above Passenger Kick, black 30 pin plug, pin 7 |
| Mirror Defroster | (CAN IHS) | | |
| Left Front Heated Seat | (LIN) | | |
| Right Front Heated Seat | (LIN) | | |
| Heated Steering Wheel | (LIN) | | |
| Speed Sense | Dk. Green/White (some models only) | AC | BCM above driver kick, white 48 pin plug (F), pin 48 |

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| Item | Wire Color | Polarity | Wire Location |
|------|-----------|----------|---------------|
| Brake Wire | Dk. Green/White | + | BCM above driver kick, white 24 pin plug (D), pin 18 |
| Parking Brake | Violet (EPB indicator) | | Electric Parking Brake Switch, black 12 pin plug, pin 10 |
| Horn Trigger | Dk. Green/Violet | - | BCM above driver kick, white 48 pin plug (F), pin 29 |
| Wipers | Brown/Blue | + | BCM above driver kick, black 24 pin plug (A), pin 12 |
| 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 |
| Left Rear Window (Up/Down) | Tan/Yellow - Tan/Blue | A | Left Rear Power Window Switch, gray 6 pin plug, pins 2 - 3 |
| Right Rear Window (Up/Down) | Orange/Brown - Orange/Violet | A | Right Rear Power Window Switch, gray 6 pin plug, pins 2 - 3 |
| Rear Sliding Window Open-Close | Tan/Brown - Tan/Orange | Reverse | Power Sliding Rear Window Switch, black 5 pin plug, pins 2 - 3 |
| Sun Roof (Open/Close) | Orange/Tan - Orange/Blue (function with ignition on only) | - | Electronic Overhead Module, gray 16 pin plug, pins 5 - 15 |
| Sun Roof (Limit/Close) | Orange/Yellow (vent) (functions with ignition on only) | - | Electronic Overhead Module, gray 16 pin plug, pin 6 |
| Memory Seat 1 | Violet/Brown | - Resistor | Memory Set Switch, black 4 pin plug, pin 1 |
| Memory Seat 2 | (same as memory seat 1) | - Resistor | |
| Radio 12V | Red | + | Radio, black 52 pin plug, pin 44 |
| Radio Ground | Black | - | Radio, black 52 pin plug, pin 43 |
| Radio Ignition | Pink/Yellow (delayed accessory) | + | Power Outlet --or-- Driver Kick, door harness |
| Factory Amp Turn-on | (CAN IHS) | | |
| Left Front Speaker (+/-) | Gray/Violet - Gray/Yellow or Dk. Green - Dk. Green/Brown | +,- | Radio, black 52 pin plug, pins 47 - 51 |
| Right Front Speaker (+/-) | Dk. Green/Violet - Dk. Green/Yellow or Gray - Gray/Brown | +,- | Radio, black 52 pin plug, pins 46 - 50 |
| Left Rear Speaker (+/-) | Gray/Green - Gray/Dk. Green or Dk. Green/Dk. Blue - Dk. Green/Orange | +,- | Radio, black 52 pin plug, pins 48 - 52 |

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| Item | Wire Color | Polarity | Wire Location |
|------|-----------|----------|---------------|
| Right Rear Speaker (+/-) | Dk. Green/Green - Dk. Green/Gray or Gray/Dk. Blue - Gray/Orange | +,- | Radio, black 52 pin plug, pins 45 - 49 |
| Left Front Speaker - With Amp | Gray/Violet - Gray/Yellow (woofer); Gray/Orange - Gray/Yellow (dash midrange) | +,- | Amplifier under driver seat, gray 10 pin plug, pins 4 - 9 (woofer); pins 2 - 7 (dash midrange) |
| Right Front Speaker - With Amp | Dk. Green/Violet - Dk. Green/Yellow (woofer); Gray/Dk. Green - Gray/Green (dash midrange) | +,- | Amplifier under driver seat, gray 10 pin plug, pins 5 - 10 (woofer); pins 3 - 8 (dash midrange) |
| Left Front Tweeter - With Amp | Dk. Blue/Blue - Dk. Blue/Yellow (premium 2 systems) | +,- | Amplifier under driver seat, gray 22 pin plug, pins 10 - 21 |
| Right Front Tweeter - With Amp | Dk. Blue/Green - Dk. Blue/Brown (premium 2 systems) | +,- | Amplifier under driver seat, gray 22 pin plug, pins 9 - 20 |
| Left Rear Speaker - With Amp | Gray/Green - Gray/Dk. Green | +,- | Amplifier under driver seat, gray 22 pin plug, pins 4 - 15 |
| Right Rear Speaker - With Amp | Dk. Green/Green - Dk. Green/Gray | +,- | Amplifier under driver seat, gray 22 pin plug, pins 5 - 16 |
| Left Rear Tweeter - With Amp | Dk. Green/Dk. Blue - Dk. Green/Tan | +,- | Amplifier under driver seat, gray 22 pin plug, pins 6 - 17 |
| Right Rear Tweeter - With Amp | Gray/Dk. Blue - Gray/Tan | +,- | Amplifier under driver seat, gray 22 pin plug, pins pins 7 - 18 |
| Center Channel - With Amp | Gray/Brown - Gray/Orange | +,- | Amplifier under driver seat, gray 22 pin plug, pins 8 - 19 |
| Subwoofer - With Amp | Gry/Brn - Dk. Grn/Brn (coil 1); Gry/Wht - Dk. Grn/Wht (coil 2); Gry/Org - Dk. Grn/Org (coil 3) (premium 1 systems) | +,- | Amplifier under driver seat, gray 22 pin plug, pins 10 - 21 (coil 1); pins 11 - 22 (coil 2); pins 9 - 20 (coil 3) |
| Subwoofer - With Amp 2 | Gray/Brown - Dk. Green/Brown (premium 2 systems) | +,- | Amplifier under driver seat, gray 22 pin plug, pins 11 - 22 |
| Aux. Audio Input Left (+/-) | Green/Tan - Green/Dk. Blue | +,- | Radio, black 52 pin plug, pins 16 - 7 |
| Aux. Audio Input Right (+/-) | Green/Blue - Green/Dk. Blue | +,- | Radio, black 52 pin plug, pins 6 - 7 |
| Rearview Camera Video | (coaxial cable - LVDS) | | |
| RSE Audio Left (+/-) | Dk. Green/White - Gray/Orange (CD audio) | +,- | Radio, black 52 pin plug, pins 10 - 9 |
| RSE Audio Right (+/-) | Gray/White - Gray/Orange (CD audio) | +,- | Radio, black 52 pin plug, pins 8 - 9 |

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### *What Fits*

| Item | Size | Depth | Location |
|------|------|-------|----------|

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### *Additional Wiring Notes*

| Item | Note |
|------|------|
| CAN Bus High | The CAN C high is also brown at the BCM above driver kick, black 48 pin plug (E), pin 25. |
| CAN Bus High 2 | The CAN IHS high is also white/green at the BCM above driver kick, white 48 pin plug (F), pin 12. |
| CAN Bus Low | The CAN C Low is also yellow at the BCM above driver kick, black 48 pin plug (E), pin 26. |
| CAN Bus Low 2 | The CAN IHS low is also white at the BCM above driver kick, white 48 pin plug (F), pin 11. |