2009 Mercedes Benz CLS Class (W219)



## Wiring Information

| Item                | Wire Color                            | Polarity   | Wire Location                                      |
|---------------------|---------------------------------------|------------|--|
| 12 Volts            | red (20A)                             | +          | Electronic Ignition Switch, 5 pin plug (C), pin 1  |
| Second 12 Volts     | red (150A)                            | +          | driver dash fuse box                               |
| Starter             | purple/white (for starter kill only)  | +          | underhood fuse box, 6 pin plug (B2), pin 5         |
| Second Starter      | N/A                                   |            |  |
| Ignition            | pink/red (for ignition sense<br>only) | + low curr | Electronic Ignition Switch, 5 pin plug (C), pin 2  |
| Second Ignition     | N/A                                   |            |  |
| Third Ignition      | N/A                                   |            |  |
| Accessory           | N/A                                   |            |  |
| Second Accessory    | N/A                                   |            |  |
| Third Accessory     | N/A                                   |            |  |
| Key Sense           | N/A                                   |            |  |
| Data Bus            | N/A                                   |            |  |
| Can Bus High        | brown/red                             | data       | Central Gateway Module, 10 pin plug, pin 10        |
| Can Bus Low         | brown                                 | data       | Central Gateway Module, 10 pin plug, pin 9         |
| Can Bus Sw          | N/A                                   |            |  |
| Power Lock          | (CAN bus)                             |            |  |
| Power Unlock        | (CAN bus)                             |            |  |
| Lock Motor          | black                                 | 5 wire     | Left Front Door Module, plug (C5), pin 3           |
| Unlock Motor        | red                                   | 5 wire     | Left Front Door Module, plug (C5), pin 2           |
| Disarm Defeat       | red                                   | 5 wire     | Right Front Door Module, plug (C5), pin 2          |
| Parking Lights (+)  | gray/black (LF), gray/red<br>(RF)     | +          | underhood fuse box, 4 pin plug (I12), pins 1 and 2 |
| Parking Lights (-)  |                                       |            |  |
| Hazards             | (CAN bus)                             |            |  |
| Turn Signal (Left)  | black/white (LF)                      | +          | underhood fuse box, 10 pin plug (M3), pin 5        |
| Turn Signal (Right) | black/green (RF)                      | +          | Passenger Side SAM Module, 6 pin plug (I3), pin 1  |

Wiring Information (Continued)

| Item                       | Wire Color                             | Polarity  | Wire Location  |
|----------------------------|--|-----------|--|
| Headlight                  | yellow/black (L)                       | +         | underhood fuse box, 10 pin plug                      |
|                            | , , , , , , , , , , , , , , , , , , ,  |           | (M3), pin 2  |
| AutoLights                 |  |           |  |
| Reverse Light              | gray/yellow                            | +         | trunk fuse box, 14 pin plug (C14),<br>pin 8          |
| Left Front Door Trigger    | brown/yellow                           | -         | trunk fuse box, 12 pin plug (C2), pin<br>9           |
| Right Front Door Trigger   | brown/white                            | -         | trunk fuse box, 12 pin plug (C2), pin<br>8           |
| Left Rear Door Trigger     | brown/blue                             | -         | trunk fuse box, 12 pin plug (C2), pin<br>11          |
| Right Rear Door Trigger    | brown/purple                           | -         | trunk fuse box, 12 pin plug (C2), pin<br>10          |
| Dome Supervision           | (CAN bus)                              |           |  |
| Trunk/Hatch Pin            | green                                  | -         | trunk fuse box, 28 pin plug (C21),<br>pin 4          |
| Rear Glass Pin             | N/A                                    |           |  |
| Hood Pin                   | brown/red                              | -         | trunk fuse box, 6 pin plug (C4), pin 1               |
| Trunk Hatch/Release        | gray/yellow                            | -         | trunk fuse box, 28 pin plug (C21),<br>pin 5          |
| Trunk Release Motor        | red/brown or gray/pink                 | 5 wire    | trunk fuse box, 28 pin plug (C21),<br>pin 11 or 7    |
| Fuel Door Release          | brown or red/yellow                    | 5 wire    | trunk fuse box, 4 pin plug (C13), pin 2 or 3         |
| Power Sliding Door (Left)  | N/A                                    |           |  |
| Power Sliding Door (Right) | N/A                                    |           |  |
| Factory Alarm Arm          | factory remote only                    |           |  |
| Factory Alarm Disarm       | factory remote only                    |           |  |
| Disarm No Unlock           |  |           |  |
| Trunk Alarm Shunt          | N/A                                    |           |  |
| Tachometer                 | white/stripe                           | ac        | any fuel injector                                    |
| Wait to Start              | N/A                                    |           |  |
| Neutral Safety             | N/A                                    |           |  |
| Clutch Pedal               | N/A                                    |           |  |
| Fuel Pump                  | red/green                              | +         | trunk fuse box, 7 pin plug (C1), pin 3               |
| Rear Defroster             | red                                    | + latched | trunk fuse box, 5 pin plug (C20), pin<br>5           |
| Mirror Defroster           | (CAN bus)                              |           |  |
| Left Front Heated Seat     | white/green (without seat ventilation) | 5 wire    | Passenger Side SAM Module, 4 pin<br>plug (I5), pin 1 |
| Right Front Heated Seat    | white/gray (without seat ventilation)  | 5 wire    | Passenger Side SAM Module, 4 pin<br>plug (I5), pin 3 |

## Wiring Information (Continued)

| ltere                        | Wire Color                                   | Delevity | Wire Location                                      |  |
|------------------------------|--|----------|--|--|
| Item                         | Wire Color                                   | Polarity | Wire Location                                      |  |
| Speed Sense                  |  |          |  |  |
| Brake Wire                   | black/pink (functions with ignition on only) | +        | trunk fuse box, 28 pin plug (C21), pin<br>22       |  |
| Parking Brake                | brown/white                                  | -        | parking brake switch, 2 pin plug, pin<br>1         |  |
| Horn Trigger                 | yellow                                       | +        | underhood fuse box, 14 pin plug<br>(M2), pin 10    |  |
| Wipers                       | (data bus)                                   |          |  |  |
| Left Front Window (Up/Down)  |  |          |  |  |
| Right Front Window (Up/Down) |  |          |  |  |
| Left Rear Window (Up/Down)   |  |          |  |  |
| Right Rear Window (Up/Down)  |  |          |  |  |
| Sun Roof (Open/Close)        |  |          |  |  |
| Sun Roof (Limit/Close)       |  |          |  |  |
| Memory Seat 1                | (data bus)                                   |          |  |  |
| Memory Seat 2                | (data bus)                                   |          |  |  |
| Memory Seat 3                | (data bus)                                   |          |  |  |
| Radio 12V                    | red/yellow                                   | +        | radio, 16 pin plug, pin 15                         |  |
| Radio Ground                 | brown  | -        | radio, 16 pin plug, pin 12                         |  |
| Radio Ignition               | (CAN bus)                                    |          |  |  |
| Radio Illumination           | (CAN bus)                                    |          |  |  |
| Factory Amp Turn-on          | pink (MOST wake up)                          |          | radio, 16 pin plug, pin 16                         |  |
| Power Antenna                | N/A  |          |  |  |
| Left Front Speaker (+/-)     | red - brown/red                              | +,-      | amplifier, 32 pin plug, pins 6 and 18              |  |
| Right Front Speaker (+/-)    | white - brown/white                          | +,-      | amplifier, 32 pin plug, pins 5 and 17              |  |
| Left Rear Speaker (+/-)      | yellow - brown/yellow                        | +,-      | amplifier, 32 pin plug, pins 8 and 20              |  |
| Right Rear Speaker (+/-)     | pink - brown/pink                            | +,-      | amplifier, 32 pin plug, pins 7 and 19              |  |
| Center Channel (+/-)         | blue - brown/blue                            | +,-      | amplifier, 32 pin plug, pins 23 and 28             |  |
| Subwoofer (+/-)              | white - brown                                | +,-      | amplifier, 32 pin plug, pins 24 and 29             |  |
| Aux. Audio Input Left (+/-)  | black - brown                                | +,-      | radio, 12 pin plug, pins 4 and 9                   |  |
| Aux. Audio Input Right (+/-) | yellow - brown                               | +,-      | radio, 12 pin plug, pins 10 and 9                  |  |
| RSE Video (+/-)              | N/A  |          |  |  |
| RSE Audio Left (+/-)         | N/A  |          |  |  |
| RSE Audio Right (+/-)        | N/A  |          |  |  |
| Satellite Radio 12 Volts     | red/green                                    | +        | Satellite Radio Control Unit, 3 pin<br>plug, pin 2 |  |
| Satellite Radio Ground       | brown  | -        | Satellite Radio Control Unit, 3 pin plug, pin 1    |  |
| Satellite Radio Ignition     | pink (MOST wake up)                          |          | Satellite Radio Control Unit, 3 pin<br>plug, pin 3 |  |
| Satellite Radio Antenna      | (coaxial cable)                              |          |  |  |
| Satellite Audio Left (+/-)   | (MOST bus)                                   |          |  |  |
| Satellite Audio Right (+/-)  | (MOST bus)                                   |          |  |  |

## What Fits

| ltem                  | Size      | Depth | Location                                    |
|-----------------------|-----------|-------|---|
| Headunit              | irregular |       | center of dash                              |
| Left Front Speaker    |           |       | left front door                             |
| Left Front Tweeter    |           |       | left front door                             |
| Right Front Speaker   |           |       | right front door                            |
| Right Front Tweeter   |           |       | right front door                            |
| Left Rear Speaker     |           |       | left rear door                              |
| Left Rear Tweeter     |           |       | left rear door; left rear deck (surround)   |
| Right Rear Speaker    |           |       | right rear door                             |
| Right Rear Tweeter    |           |       | right rear door; right rear deck (surround) |
| Center Channel        |           |       | top center of dash                          |
| Subwoofer             |           |       | top center of rear deck                     |
| Left Front Headrest   |           |       |   |
| Right Front Headrest  |           |       |   |
| Left Right Headrest   |           |       |   |
| Right Rear Headrest   |           |       |   |
| Satellite Radio Tuner |           |       | right side of luggage compartment           |

## Additional Wiring Notes

| Item                      | Note  |  |  |
|---------------------------|---|--|--|
| Trunk Hatch/Release       | Meter this wire while opening the luggage compartment from the handle on the rear of the vehicle.   |  |  |
| Turn Signal (Right)       | The Passenger Side SAM Module is on the front passenger floorboard. The RR wire is blue/black at the trunk fuse box, 14 pin plug (C14), pin 3.                  |  |  |
| Parking Lights (+)        | The LR - RR wires are gray/black - gray/red at the trunk fuse box, 14 pin plug (C14), pins 9 and 12.  |  |  |
| Turn Signal (Left)        | The LR wire is green/black at the trunk fuse box, 14 pin plug (C14), pin 11.  |  |  |
| Headlight                 | The R headlight wire is yellow at the Passenger Side SAM Module, 6 pin plug (I3), pin 6. The Passenger Side SAM Module is on the front passenger floorboard.    |  |  |
| Left Front Heated Seat    | The Passenger Side SAM Module is on the front passenger floorboard.   |  |  |
| Right Front Heated Seat   | The Passenger Side SAM Module is on the front passenger floorboard.   |  |  |
| Subwoofer (+/-)           | The amplifier is in the left side of the luggage compartment. The subwoofer amp turn on wire is purple at the amplifier, 32 pin plug, pin 31.                   |  |  |
| Can Bus High              | The Central Gateway Module is under the driver dash.  |  |  |
| Can Bus Low               | The Central Gateway Module is under the driver dash.  |  |  |
| Left Rear Speaker (+/-)   | The amplifier is in the left side of the luggage compartment. The surround speaker wires are green - brown/green at the amplifier, 32 pin plug, pins 10 and 22. |  |  |
| Right Rear Speaker (+/-)  | The amplifier is in the left side of the luggage compartment. The surround speaker wires are gray - brown/gray at the amplifier, 32 pin plug, pins 9 and 21.    |  |  |
| Left Front Speaker (+/-)  | The amplifier is in the left side of the luggage compartment.   |  |  |
| Right Front Speaker (+/-) | The amplifier is in the left side of the luggage compartment.   |  |  |
| Center Channel (+/-)      | The amplifier is in the left side of the luggage compartment.   |  |  |
| Satellite Radio 12 Volts  | The Satellite Radio Control Unit is in the right side of the luggage compartment.   |  |  |