| F Series ABS Wiring | ABS Type – MRAABSN |
|---|---|

| 99-03 Single Spark CS GS Dakar Pin | | | 04-05 Dual Spark CS GS Dakar Pin | | | | | |
|---|---|---|---|---|---|---|---|---|
| CS GS Pin | Dakar Pin | Color | CS GS Pin | Dakar Pin | Color | Signal | Direction | Signal Description |
| 1 | 1 | None | 1 | 1 | Ws/Sw | SEHE | I/P | Rear Wheel Sensor B9194 via Pin 2 of X9194 |
| 3 | 3 | Rt | 3 | 3 | Ws/Br | SEHA | I/P | Rear Wheel Sensor B9194 via Pin 1 of X9194 |
| 6 | 6 | None | 6 | 6 | Ge/Rt | SEVE | I/P | Front Wheel Sensor B9193 via Pin 2 of X9193 |
| 7 | 7 | Gn | 7 | 7 | Ge/Br | SEVA | I/P | Front Wheel Sensor B9193 via Pin 1 of X9193 |
| **21** | **10** | Ws/Ge | **21** | **10** | Ws/Ge | ABSW | O/P | GD To X9001 Pin 10 – Dash – Dash Lamp Driver |
| 11 | 11 | Br/Sw | 11 | 11 | Br/Sw | DIAG | Bi | To X9397 and Pin 1 of X9590 to BMSC |
| 12 | 12 | Gn/Gr | 12 | 12 | Gn/Gr | 54F | I/P | From Rear Brake Switch S9052 via Pin 1 of X9052 |
| 13 | 13 | Sw/Gn | **13** | **27** | Sw/Gn | TAST | I/P | From S9195 ABS On/Off Switch via Pin 2 of X9195 |
| 14 | 14 | Gn/Ws | 14 | 14 | Gn/Ws | 54H | I/P | From Front Brake Switch S9051 via Pin 1 of X9051 |
| 15 | 15 | Gn | 15 | 15 | Gn | 15U | I/P | From X9450 & Ignition Switch – Ignition on sense |
| 16 | 16 | Br | 16 | 16 | Br | 31 | | To X9231 – Batt – Ground |
| 17 | 17 | Rt | 17 | 17 | Rt | 30 | | From X9230 – Battery + Main Power |
| 18 | 18 | Rt | 18 | 18 | Rt | 30 | | From X9230 – Battery + Main Power |
| 19 | 19 | Br | 19 | 19 | Br | 31 | | To X9231 – Batt – Ground |
| 24 | | Ge | 24 | 24 | Ge | TACHO | O/P | To X9001 Pin 3 – Dash |

**Note – BMW has updated the 99-03 F650GS diagrams to show the difference in ABSW signal pins between GS & Dakar**

| **Color Code** | | **Notes** | The early BMW wiring diagrams have errors for the signals below |
|---|---|---|---|
| Br – Brown | Rt – Red | | Pin 13 is the input for the on/off switch on the SS & Pin 27 on the DS |
| Ge – Yellow | Sw – Black | | Pin 13 is not used on the CS as there is no ABS On/Off Switch |
| Gn – Green | Ws – White | | Pin 21 is the output to the Dash Lamp for CS and GS, Pin 10 on the Dakar |
| Gr – Grey | Sw – Black | | ABS Lamp Disable - Loop Pin 16 to 10/21, Speed Sensor to Dash - Loop Pin 3 to 24 |