# 2003 BMW 5 Series

### Wiring Information

Item	Wire Color	Polarity	Wire Location
12 Volts	red	+	ignition harness
Second 12 Volts			
Starter	black/yellow	+	ignition harness
Second Starter			
Ignition	green	+	ignition harness
Second Ignition	purple	+	ignition harness
Third Ignition			
Accessory			
Second Accessory			
Third Accessory			
Key Sense			
Data Bus			
Can Bus High			
Can Bus Low			
Can Bus Sw			
Power Lock	blue/red	+	driver door module in door
Power Unlock	black/white (double pulse)	+	driver door module in door
Lock Motor			
Unlock Motor			
Disarm Defeat			
Parking Lights (+)			
Parking Lights (-)	black		headlight switch
Hazards			
Turn Signal (Left)			
Turn Signal (Right)			

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# Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Headlight			
AutoLights			
Reverse Light			
Left Front Door Trigger	blue/red	+	dome light
Right Front Door Trigger			
Left Rear Door Trigger			
Right Rear Door Trigger			
Dome Supervision	comes on with unlock		
Trunk/Hatch Pin	brown/white	-	trunk pin switch
Rear Glass Pin			
Hood Pin			
Trunk Hatch/Release	gray/black	-	trunk release switch
Trunk Release Motor			
Fuel Door Release			
Power Sliding Door (Left)			
Power Sliding Door (Right)			
Factory Alarm Arm	arms with lock		
Factory Alarm Disarm	disarms with unlock		
Disarm No Unlock			
Trunk Alarm Shunt			
Tachometer	black	ac	round diagnostic plug under hood
Wait to Start			
Neutral Safety			
Clutch Pedal			
Fuel Pump			
Rear Defroster			
Mirror Defroster			
Left Front Heated Seat			
Right Front Heated Seat			

# Wiring Information (Continued)

Speed Sense Brake Wire brown/gray brown/gray brake pedal switch Parking Brake Horn Trigger Wipers Left Front Window (Up/Down) Left Rear Window (Up/Down) Right Rear Window (Up/Down) Sun Roof (Umit/Close) Sun Roof (Umit/Close) Sun Roof (Umit/Close) Memory Seat 1 Memory Seat 2 Memory Seat 3 Radio 12V Radio Ground Radio Ignition Radio Illumination Factory Amp Turn-on Power Antenna Left Front Speaker (+/-) Left Rear Speaker (+/-) Right Front Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) RSE Video (+/-) RSE Video (+/-) RSE Audio Input Left (+/-) RSE Video (+/-) RSE Audio Right (+/-) RSE Audio R	Item	Wire Color	Polarity	Wire Location
Brake Wire	7.5	Wife Color	Folarity	Wife Location
Parking Brake Horn Trigger Wipers Left Front Window (Up/Down) Right Front Window (Up/Down) Left Rear Window (Up/Down) Sun Roof (Open/Close) Sun Roof (Climit/Close) Memory Seat 1 Memory Seat 2 Memory Seat 3 Radio 12V Radio Ground Radio Ignition Radio Illumination Factory Amp Turn-on Power Antenna Left Front Speaker (+/-) Right Front Speaker (+/-) Center Channel (+/-) Subwoofer (+/-) Aux. Audio Input Left (+/-) RSE Video (+/-) RSE Video (+/-) RSE Video (H/-) Ratel Radio Ground RSE Audio Right (+/-) Satellite Radio Ground Satellite Radio Ignition Satellite Radio Ignition Satellite Radio Antenna		brown/gray	1	hrake nedal switch
Horn Trigger   Wipers   See notes   See notes   Wipers   See notes   See		biowii/gray	т т	brake pedar switch
Wipers         Left Front Window (Up/Down)           Left Rear Window (Up/Down)         Left Rear Window (Up/Down)           Left Rear Window (Up/Down)         Right Rear Window (Up/Down)           Sun Roof (Open/Close)         see notes           Sun Roof (Limit/Close)         Memory Seat 1           Memory Seat 2         Memory Seat 3           Radio 12V         Radio Ground           Radio Ignition         Radio Illumination           Factory Amp Turn-on         Power Antenna           Left Front Speaker (+/-)         Left Front Speaker (+/-)           Left Rear Speaker (+/-)         Right Front Speaker (+/-)           Left Rear Speaker (+/-)         Right Rear Speaker (+/-)           Rubwoofer (+/-)         Subwoofer (+/-)           Aux. Audio Input Left (+/-)         RSE Video (+/-)           RSE Audio Left (+/-)         RSE Audio Left (+/-)           RSE Audio Left (+/-)         RSE Audio Right (+/-)           Satellite Radio Ground         Satellite Radio Ignition           Satellite Radio Ignition         Satellite Radio Antenna           Satellite Audio Left (+/-)         Satellite Radio Left (+/-)				
Left Front Window (Up/Down)         see notes           Right Front Window (Up/Down)         Right Rear Window (Up/Down)           Sun Roof (Open/Close)         see notes           Sun Roof (Limit/Close)         Memory Seat 1           Memory Seat 2         Memory Seat 3           Memory Seat 3         Radio 12V           Radio Ignition         Radio Ignition           Radio Illumination         Factory Amp Turn-on           Power Antenna         Left Front Speaker (*/-)           Left Front Speaker (*/-)         Right Front Speaker (*/-)           Right Rear Speaker (*/-)         Right Rear Speaker (*/-)           Center Channel (*/-)         Subwoofer (*/-)           Aux. Audio Input Left (*/-)         Aux. Audio Input Right (*/-)           RSE Audio Left (*/-)         RSE Audio Right (*/-)           Satellite Radio 12 Volts         Satellite Radio Ground           Satellite Radio Ignition         Satellite Radio Antenna           Satellite Audio Left (*/-)         Satellite Audio Left (*/-)				
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  Memory Seat 2  Memory Seat 3  Radio 12V  Radio Ground  Radio Ignition  Radio Illumination  Factory Amp Turn-on  Power Antenna  Left Front Speaker (+/-)  Right Front Speaker (+/-)  Right Rear Speaker (+/-)  Center Channel (+/-)  Subwoofer (+/-)  Aux. Audio Input Left (+/-)  Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Video (+/-)  RSE Audio Left (+/-)  RSE Audio Left (+/-)  Ratellite Radio Ground  Satellite Radio Ignition  Satellite Radio Ignition  Satellite Radio Ignition  Satellite Radio Intenna	-			
Left Rear Window (Up/Down)           Right Rear Window (Up/Down)           Sun Roof (Den/Close)         see notes           Sun Roof (Limit/Close)           Memory Seat 1         Memory Seat 2           Memory Seat 3         Radio 12V           Radio 12V         Radio Ground           Radio Ignition         Radio Illumination           Factory Amp Turn-on         Power Antenna           Left Front Speaker (+/-)         Right Front Speaker (+/-)           Right Rear Speaker (+/-)         Right Rear Speaker (+/-)           Center Channel (+/-)         Subwoofer (+/-)           Subwoofer (+/-)         Aux. Audio Input Left (+/-)           RSE Video (+/-)         RSE Audio Left (+/-)           RSE Audio Right (+/-)         RSE Audio Right (+/-)           Satellite Radio Ground         Satellite Radio Ignition           Satellite Radio Antenna         Satellite Audio Left (+/-)		see notes		
Right Rear Window (Up/Down)   Sun Roof (Cpen/Close)   See notes				
Sun Roof (Den/Close)  Sun Roof (Limit/Close)  Memory Seat 1  Memory Seat 2  Memory Seat 3  Radio 12V  Radio Ground  Radio Illumination  Factory Amp Turn-on  Power Antenna  Left Front Speaker (+t-)  Right Front Speaker (+t-)  Right Rear Speaker (+t-)  Center Channel (+t-)  Subwoofer (+t-)  Aux. Audio Input Left (+t-)  Aux. Audio Input Right (+t-)  RSE Video (+t-)  RSE Video (+t-)  RSE Audio Right (+t-)  RSE Audio Right (+t-)  Satellite Radio Ground  Satellite Radio Ignition  Satellite Radio Intenna  Satellite Radio Antenna  Satellite Radio Antenna  Satellite Radio Left (+t-)  Satellite Radio Antenna  Satellite Radio Antenna  Satellite Radio Antenna  Satellite Radio Left (+t-)				
Sun Roof (Limit/Close)  Memory Seat 1  Memory Seat 2  Memory Seat 3  Radio 12V  Radio Ground  Radio Ignition  Radio Illumination  Factory Amp Turn-on  Power Antenna  Left Front Speaker (+/-)  Right Front Speaker (+/-)  Right Rear Speaker (+/-)  Center Channel (+/-)  Subwoofer (+/-)  Aux. Audio Input Left (+/-)  Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Audio Right (+/-)  RSE Audio Right (+/-)  Satellite Radio Ground  Satellite Radio Ignition  Satellite Radio Antenna  Satellite Radio Antenna  Satellite Radio Antenna  Satellite Radio Left (+/-)				
Memory Seat 1  Memory Seat 2  Memory Seat 3  Radio 12V  Radio Ground  Radio Ignition  Radio Illumination  Factory Amp Turn-on  Power Antenna  Left Front Speaker (+/-)  Right Front Speaker (+/-)  Left Rear Speaker (+/-)  Right Rear Speaker (+/-)  Subwoofer (+/-)  Subwoofer (+/-)  Aux. Audio Input Left (+/-)  Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Video (+/-)  RSE Audio Left (+/-)  RSE Audio Right (+/-)  Satellite Radio Ground  Satellite Radio Ignition  Satellite Radio Antenna  Satellite Radio Antenna  Satellite Radio Left (+/-)		see notes		
Memory Seat 2  Memory Seat 3  Radio 12V  Radio Ground  Radio Ignition  Radio Illumination  Factory Amp Turn-on  Power Antenna  Left Front Speaker (+/-)  Right Front Speaker (+/-)  Left Rear Speaker (+/-)  Center Channel (+/-)  Subwoofer (+/-)  Aux. Audio Input Left (+/-)  Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Video (+/-)  RSE Audio Left (+/-)  RSE Audio Right (+/-)  RSE Audio Right (+/-)  Satellite Radio Ground  Satellite Radio Antenna  Satellite Radio Antenna  Satellite Radio Antenna  Satellite Radio Antenna  Satellite Radio Left (+/-)				
Memory Seat 3   Radio 12V   Radio Ground   Radio Ignition   Radio Illumination   Radio Illu				
Radio 12V Radio Ground Radio Ignition Radio Illumination Factory Amp Turn-on Power Antenna Left Front Speaker (+/-) Right Front Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Subwoofer (+/-) Aux. Audio Input Left (+/-) Aux. Audio Input Right (+/-) RSE Video (+/-) RSE Audio Left (+/-) RSE Audio Right (+/-) Satellite Radio 12 Volts Satellite Radio Ignition Satellite Radio Antenna Satellite Radio Antenna Satellite Radio Left (+/-)				
Radio Ground Radio Ignition Radio Illumination Factory Amp Turn-on Power Antenna Left Front Speaker (+/-) Right Front Speaker (+/-) Left Rear Speaker (+/-) Right Rear Speaker (+/-) Center Channel (+/-) Subwoofer (+/-) Aux. Audio Input Left (+/-) Aux. Audio Input Right (+/-) RSE Video (+/-) RSE Audio Left (+/-) RSE Audio Right (+/-) RSE Audio Right (+/-) Satellite Radio Ground Satellite Radio Ignition Satellite Radio Antenna Satellite Radio Left (+/-)				
Radio Ignition Radio Illumination Factory Amp Turn-on Power Antenna Left Front Speaker (+/-) Right Front Speaker (+/-) Left Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Right Rear Speaker (+/-) Rubwoofer (+/-) Subwoofer (+/-) Aux. Audio Input Left (+/-) Aux. Audio Input Right (+/-) RSE Video (+/-) RSE Audio Left (+/-) RSE Audio Right (+/-) Satellite Radio 12 Volts Satellite Radio Ground Satellite Radio Input I				
Radio Illumination Factory Amp Turn-on Power Antenna Left Front Speaker (+/-) Right Front Speaker (+/-) Left Rear Speaker (+/-) Right Rear Speaker (+/-) Center Channel (+/-) Subwoofer (+/-) Aux. Audio Input Left (+/-) Aux. Audio Input Right (+/-) RSE Video (+/-) RSE Audio Left (+/-) RSE Audio Left (+/-) RSE Audio Right (+/-) Satellite Radio 12 Volts Satellite Radio Ignition Satellite Radio Antenna Satellite Audio Left (+/-)				
Factory Amp Turn-on Power Antenna Left Front Speaker (+/-) Right Front Speaker (+/-) Left Rear Speaker (+/-) Left Rear Speaker (+/-) Center Channel (+/-) Subwoofer (+/-) Aux. Audio Input Left (+/-) Aux. Audio Input Right (+/-) RSE Video (+/-) RSE Audio Left (+/-) RSE Audio Left (+/-) RSE Audio Right (+/-) Satellite Radio Ground Satellite Radio Input Right (-/-) Satellite Radio Antenna Satellite Radio Left (+/-)				
Power Antenna  Left Front Speaker (+/-)  Right Front Speaker (+/-)  Left Rear Speaker (+/-)  Left Rear Speaker (+/-)  Right Rear Speaker (+/-)  Center Channel (+/-)  Subwoofer (+/-)  Aux. Audio Input Left (+/-)  Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Audio Left (+/-)  RSE Audio Right (+/-)  Satellite Radio 12 Volts  Satellite Radio Ignition  Satellite Radio Antenna  Satellite Audio Left (+/-)				
Left Front Speaker (+/-)  Right Front Speaker (+/-)  Left Rear Speaker (+/-)  Right Rear Speaker (+/-)  Right Rear Speaker (+/-)  Center Channel (+/-)  Subwoofer (+/-)  Aux. Audio Input Left (+/-)  Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Audio Left (+/-)  RSE Audio Right (+/-)  Satellite Radio Ground  Satellite Radio Ignition  Satellite Radio Antenna  Satellite Audio Left (+/-)	Factory Amp Turn-on			
Right Front Speaker (+/-)  Left Rear Speaker (+/-)  Right Rear Speaker (+/-)  Center Channel (+/-)  Subwoofer (+/-)  Aux. Audio Input Left (+/-)  Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Audio Left (+/-)  RSE Audio Right (+/-)  Satellite Radio 12 Volts  Satellite Radio Ground  Satellite Radio Ignition  Satellite Radio Antenna  Satellite Audio Left (+/-)				
Left Rear Speaker (+/-) Right Rear Speaker (+/-) Center Channel (+/-) Subwoofer (+/-) Aux. Audio Input Left (+/-) Aux. Audio Input Right (+/-) RSE Video (+/-) RSE Audio Left (+/-) RSE Audio Right (+/-) Satellite Radio 12 Volts Satellite Radio Ground Satellite Radio Ignition Satellite Radio Antenna Satellite Audio Left (+/-)				
Right Rear Speaker (+/-)  Center Channel (+/-)  Subwoofer (+/-)  Aux. Audio Input Left (+/-)  Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Audio Left (+/-)  RSE Audio Right (+/-)  Satellite Radio 12 Volts  Satellite Radio Ground  Satellite Radio Ignition  Satellite Radio Antenna  Satellite Audio Left (+/-)				
Center Channel (+/-) Subwoofer (+/-) Aux. Audio Input Left (+/-) Aux. Audio Input Right (+/-) RSE Video (+/-) RSE Audio Left (+/-) RSE Audio Right (+/-) Satellite Radio 12 Volts Satellite Radio Ground Satellite Radio Ignition Satellite Radio Antenna Satellite Audio Left (+/-)	Left Rear Speaker (+/-)			
Subwoofer (+/-) Aux. Audio Input Left (+/-) Aux. Audio Input Right (+/-) RSE Video (+/-) RSE Audio Left (+/-) RSE Audio Right (+/-) Satellite Radio 12 Volts Satellite Radio Ground Satellite Radio Ignition Satellite Radio Antenna Satellite Audio Left (+/-)	Right Rear Speaker (+/-)			
Aux. Audio Input Left (+/-)  Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Audio Left (+/-)  RSE Audio Right (+/-)  Satellite Radio 12 Volts  Satellite Radio Ground  Satellite Radio Ignition  Satellite Radio Antenna  Satellite Audio Left (+/-)	Center Channel (+/-)			
Aux. Audio Input Right (+/-)  RSE Video (+/-)  RSE Audio Left (+/-)  RSE Audio Right (+/-)  Satellite Radio 12 Volts  Satellite Radio Ground  Satellite Radio Ignition  Satellite Radio Antenna  Satellite Audio Left (+/-)	Subwoofer (+/-)			
RSE Video (+/-) RSE Audio Left (+/-) RSE Audio Right (+/-) Satellite Radio 12 Volts Satellite Radio Ground Satellite Radio Ignition Satellite Radio Antenna Satellite Audio Left (+/-)	Aux. Audio Input Left (+/-)			
RSE Audio Left (+/-) RSE Audio Right (+/-) Satellite Radio 12 Volts Satellite Radio Ground Satellite Radio Ignition Satellite Radio Antenna Satellite Audio Left (+/-)	Aux. Audio Input Right (+/-)			
RSE Audio Right (+/-) Satellite Radio 12 Volts Satellite Radio Ground Satellite Radio Ignition Satellite Radio Antenna Satellite Audio Left (+/-)	RSE Video (+/-)			
Satellite Radio 12 Volts Satellite Radio Ground Satellite Radio Ignition Satellite Radio Antenna Satellite Audio Left (+/-)	RSE Audio Left (+/-)			
Satellite Radio Ground Satellite Radio Ignition Satellite Radio Antenna Satellite Audio Left (+/-)	RSE Audio Right (+/-)			
Satellite Radio Ignition  Satellite Radio Antenna  Satellite Audio Left (+/-)	Satellite Radio 12 Volts			
Satellite Radio Antenna Satellite Audio Left (+/-)	Satellite Radio Ground			
Satellite Audio Left (+/-)	Satellite Radio Ignition			
	Satellite Radio Antenna			
	Satellite Audio Left (+/-)			

#### What Fits

Item	Size	Depth	Location
Headunit			
Left Front Speaker			
Left Front Tweeter			
Right Front Speaker			
Right Front Tweeter			
Left Rear Speaker			
Left Rear Tweeter			
Right Rear Speaker			
Right Rear Tweeter			
Center Channel			
Subwoofer			
Left Front Headrest			
Right Front Headrest			
Left Right Headrest			
Right Rear Headrest			
Satellite Radio Tuner			

### Smart Starter Kill Relay

Relay Type:	n/a
Part #:	n/a
OE Relay Part #:	
Location:	n/a

	Notes:	
n/a		
	Alternate Part Notes:	
n/a		

# Immobilizer Bypass Module

Required:	Yes
Type:	EWS III
Part #:	556UW
Alternate Part #'s:	DesignTech 20402, DesignTech 29402

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Notes:

### DirectWire Vehicle Information - 10/28/2008 9:13:51 AM

# Additional Wiring Notes

Item	Note
	Cutting this wire turns on the parking lights. Use a relay to interrupt the wire to flash the parking lights. See Tech Doc 1055 for wiring information.
	Extended triggers on the door lock wires will roll the windows up/down and open/close the sunroof. Use validity channels to control.
	Extended triggers on the door lock wires will roll the windows up/down and open/close the sunroof. Use validity channels to control.