

**393: Signal description, multimedia module (MMM)**

V50, 2006, L.H.D

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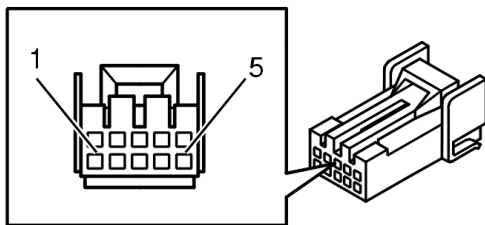
**PRINT****393: Signal description, multimedia module (MMM)****Signal specification****General**

All the values given below are between the respective terminal in column 1 and terminal #A5 in column 2 (power ground) unless otherwise stated in brackets after the table entry.

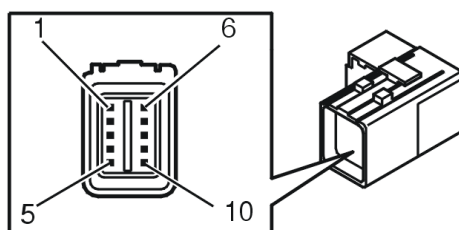
**Note! It is important to connect the breakout box and check the ground terminals before taking readings.**

U= DC voltage in volts (V)  
 $U_{bat}$  = Battery voltage (V)

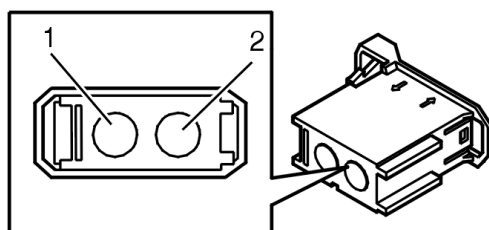
$U_{low}$  = Voltage approximately 0 V

**Connector A**

Terminal	Breakout box terminal	Signal type	Ignition on	Other
#A1	#21	15-supply (model years 2004 and 2005). 30-supply (model year 2006 - )	$U = U_{bat}$	Supplied with power (12 V) from the relay on the CEM (model years 2004 and 2005).
#A2	#22	-	-	
#A3	#23	-	-	
#A4	#24	-	-	
#A5	#25	Ground	$U = U_{low}$	

**Connector B**

Terminal	Breakout box terminal	Signal type	Ignition on	Other
#B1	#1	Color signal (red), screen	Analog signal when a red color signal is used	0.714 Vp-p
#B2	#2	Color signal (green), display	Analog signal when a green color signal is used	0.714 Vp-p
#B3	#3	-	-	
#B4	#4	Serial bus to the display	Digital signal	Half duplex, start-stop synchronizer, 2400 bps
#B5	#5	-	Digital signal	38 kHz carrier wave when the remote control is pressed
#B6	#6	Color signal (blue), screen	Analog signal when a green color signal is used	0.714 Vp-p
#B7	#7	Screen ground video signals	$U_{low}$	
#B8	#8	Composite sync, display screen	Analog signal	0-5 V
#B9	#9	-	-	
#B10	#10	Video signal, display screen	Analog signal	1 Vp-p $\pm$ 0.2V
H	-	Screen ground	-	

**Connector C**

Terminal	Breakout box terminal	Signal type	Ignition on	Other
#C1	-	MOST input signal	-	Optical input signal
#C2	-	MOST output signal	-	Optical output signal

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