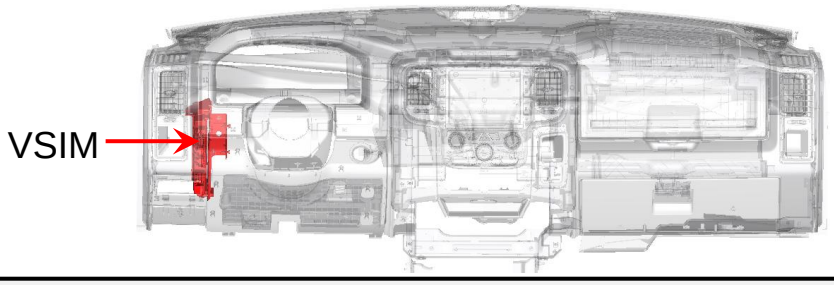
VSIM (VEHICLE SYSTEM INTERFACE MODULE) USAGE INSTRUCTIONS

Overview:

New for 2013 is a RAM Truck engineered upfitter module called the VSIM (Vehicle System Interface Module). Its sales code is "XXS" and is standard with Ambulance Prep (sales code AH2), a "must have" option with PTO Prep (sales codes LBN or LBV), and is available as a stand-alone option. It provides a multitude of useful I/O's to increase upfitter friendliness and upfit simplification.

Specifics:

1. Ghost drawings showing the module location within the dash panel.
2. The VSIM includes an upfitter wire harness kit (part number 68211680AA or 68211680AB) consisting of four separate color coded harness bundles. Each individual color harness must only be plugged into its corresponding VSIM connector cavity, see photos below showing harness color installations.
3. A photo of the four individual color coded VSIM upfitter harness bundles. Note that in a few instances an individual wire color is duplicated within a bundle – these duplications are further identified with a paper "flag" showing its circuit number. It's recommended that the upfitter, upon harness bundle routing direction determination(s), install additional harness bundle abrasion protection over each bundle (such as harness convolute).
4. Photos showing module installation within a vehicle and harness bundles.
5. A chart below delineates the circuits within each color harness bundle, circuit number, signal, wire insulation colors, maximum allowable amperage per circuit, and circuit function.
6. A chart below delineates the available 125 kbaud CAN bus messages. If downloadable "DBC" files are needed, they should be requested via the website rambbg@chrysler.com.
7. Note 1: Eight "pairs" of "output" circuits may require additional circuitry for proper function. These are flagged in the VSIM chart with an asterisk (*) in front of the Circuit # and yellow hi-lite in the box. If any these output circuits are being used and unless both circuits of a given pair are connected to an external load (e.g. a LED, incandescent bulb, upfitter module input, relay coil, etc.), an external resistor must be added to the one circuit of the pair that is not being used for another purpose. This requires a dedicated 1KΩ, ≥0.5W resistor for each individual circuit. See below for the VSIM chart delineating the "pairs" circuits that require an external resistor and the accompanying appropriate circuit diagram.
8. Note 2: six "output" circuits require "pull-up" resistors for proper function, if the circuit output is to be used. These circuits are flagged in the VSIM chart with a pound sign (#) in front of the circuit number and light blue hi-lite in the box. These circuits require a dedicated 1K-2.2KΩ, ≥0.5W resistor for each individual circuit. See below for the VSIM chart delineating the circuits requiring a "pull-up" resistor and the accompanying appropriate circuit diagram.
9. Note 3: PTO idle speed circuits W541, W542, W543 can only be programmed to function if the vehicle was built with PTO option sales codes LBN or LBV.



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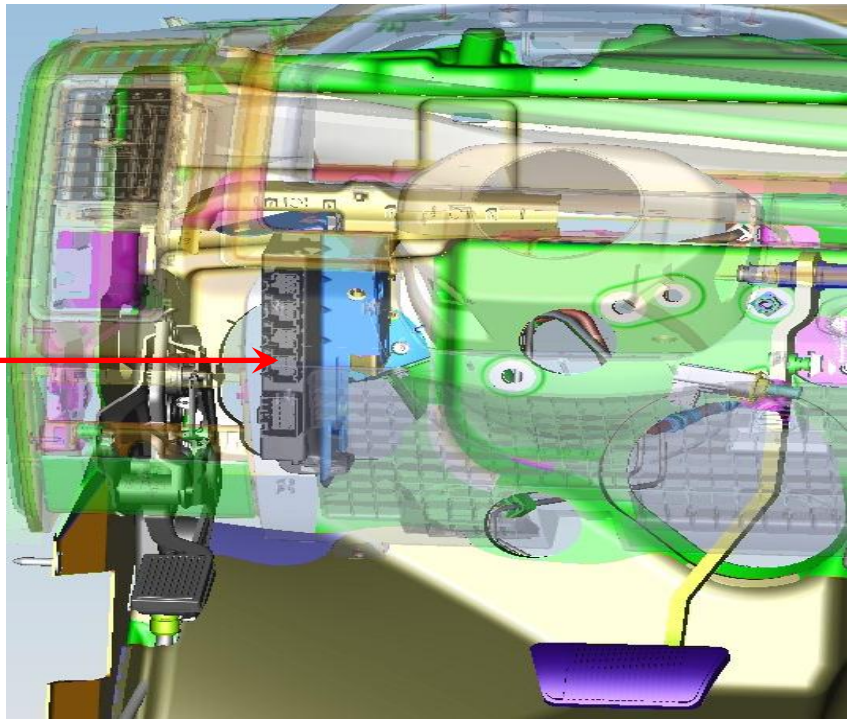

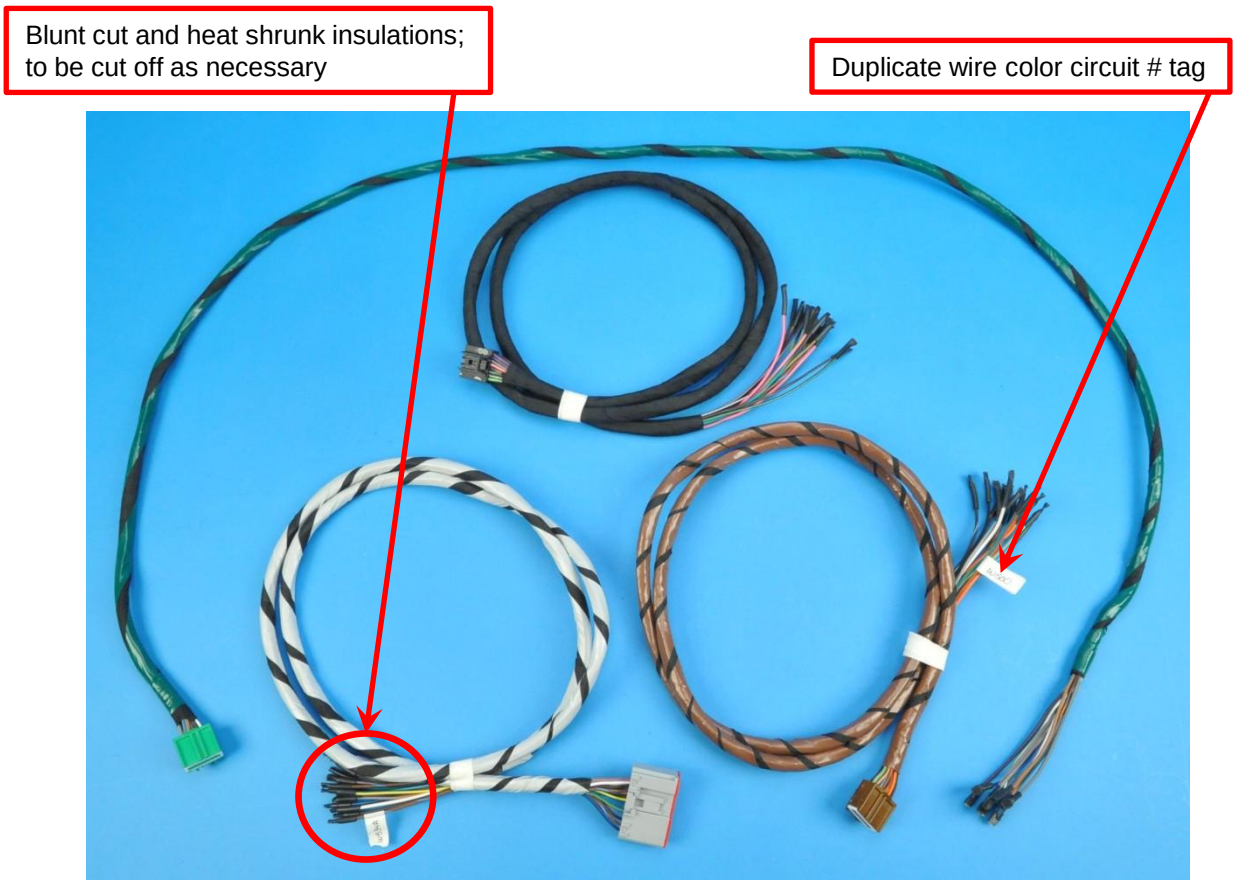

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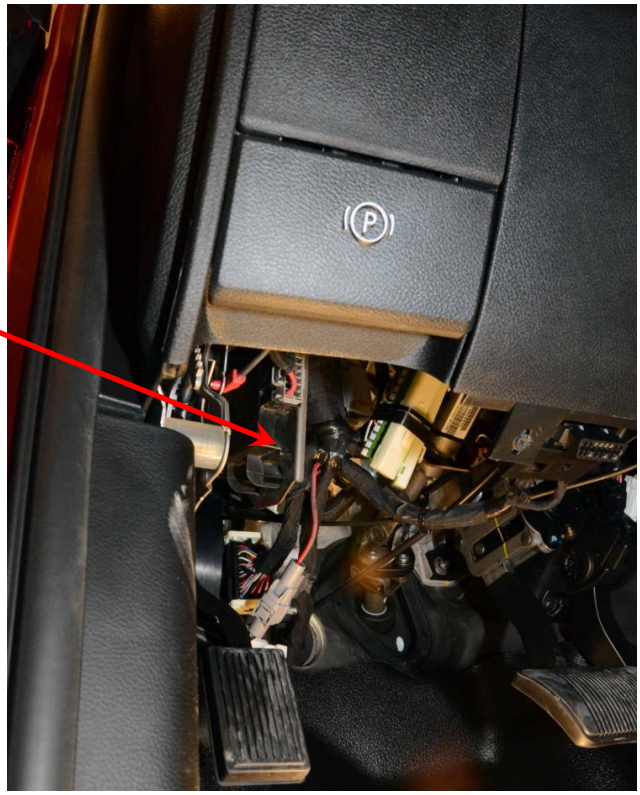

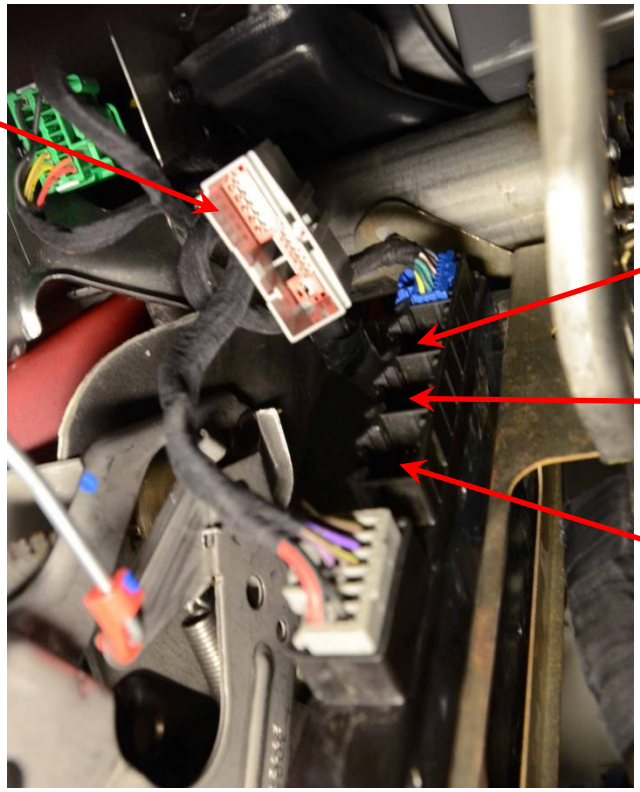

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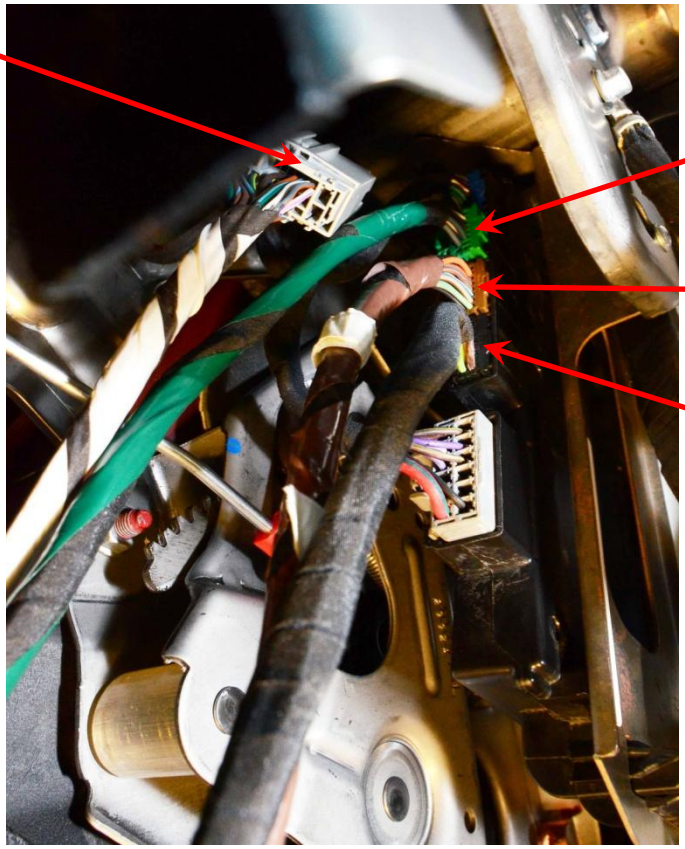
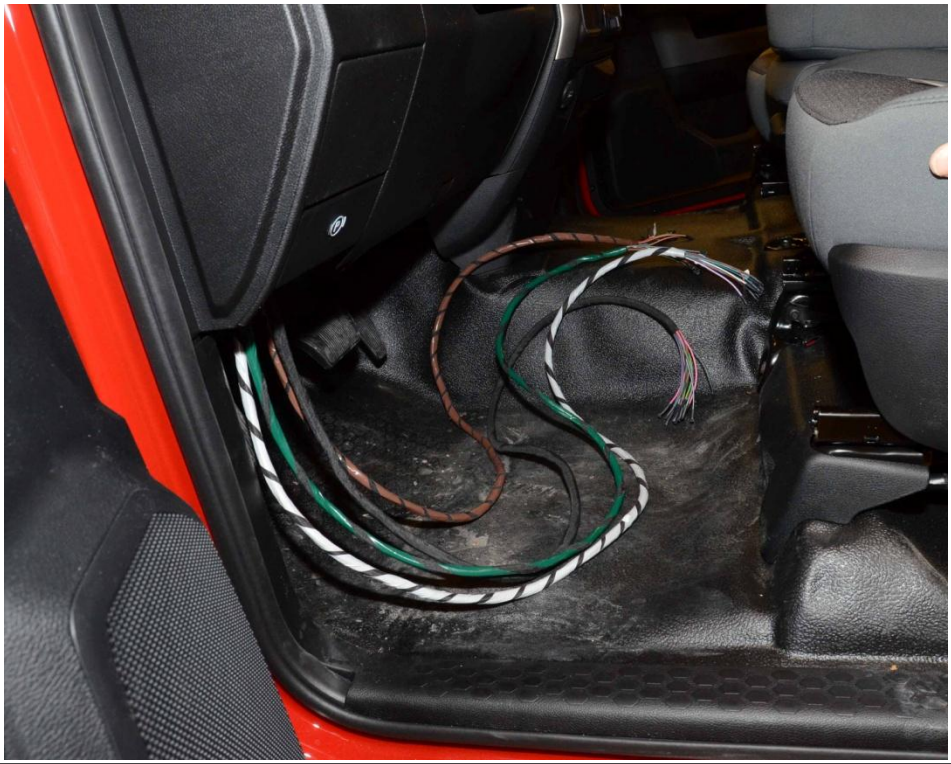


Note: When inserting the VSIM harness connectors an audible “click” will be heard when the connector is fully seated.



2013 RAM Truck VSIM I/O's - Sales Code XXS

#	Connector Identity	Circuit #	Upfitters Signal	Cavity #	Wire Color	Max. Amps	Function
1	gray 24-cavity	W719	Hazard indicator on - HSD output	2	WT/VT	0.5	open circuit when hazard flashers are off, battery positive voltage (12V) when hazard flashers are selected
2	gray 24-cavity	*W504	Transmission out of "Park" - HSD output	3	BR	0.5	open circuit when gear selector is in Park, battery positive voltage (12V) when gear selector is in any other position
3	gray 24-cavity	W545	diesel Regeneration (DPF) on - HSD output	4	BR/LB	0.5	open circuit when diesel regeneration is not energized, battery positive voltage (12V) when it is energized
4	gray 24-cavity	W743	PTO on indicator - HSD output	5	VT/TN	1.0	open circuit when PTO circuit is not energized, battery positive voltage (12V) when PTO circuit is energized
5	gray 24-cavity	*W540	MIL lamp on - HSD output	6	BR/DG	0.5	open circuit when MIL is not illuminated, battery positive voltage (12V) when MIL is illuminated
6	gray 24-cavity	W700	Transmission "Park" position - LSD output	7	YL/DB	0.5	open circuit when gear selector is not in Park, battery negative voltage (0V) when in Park
7	gray 24-cavity	W701	Transmission "Neutral" position - LSD output	8	DG/YL	0.5	open circuit when gear selector is not in Neutral, battery negative voltage (0V) when in Neutral **NOTE:** only on vehicles built prior to 5/9/2013 a "Neutral" (0V) signal will be seen when the gear selector is moved between the Park and Reverse positions
8	gray 24-cavity	W652	HVAC - A/C clutch engaged - LSD output	9	LB/BR	0.5	open circuit when A/C clutch is not engaged, battery negative voltage (0V) when engaged
9	gray 24-cavity	W532	**CAN communication - side CAN 125+	10	BR/DB	--	125 Kbaud CAN+, use in conjunction with W534; *refer to CAN spreadsheet for available messages
10	gray 24-cavity	W534	**CAN communication - side CAN 125-	11	BR/LB	--	125 Kbaud CAN-, use in conjunction with W532; *refer to CAN spreadsheet for available messages
11	gray 24-cavity	W702	Transmission "Reverse" position - LSD output	12	DG/DB	0.5	open circuit when gear selector is not in Reverse, battery negative voltage (0V) when in Reverse
	gray 24-cavity			14	LB/OR		this wire is included in the VSIM upfitter harness but is not used
12	gray 24-cavity	W711	Cargo Lamp output - LSD output	15	WT/TN	0.5	activated via W506, relay driver, open circuit when W506 is "OFF", battery negative voltage (0V) when W506 is "ON", times out after 30 minutes, re-enable by cycling W506 switch
13	gray 24-cavity	W703	Transmission "Drive" position - LSD output	16	DG/LB	0.5	open circuit when gear selector is not in Drive, battery negative voltage (0V) when in Drive
14	gray 24-cavity	W720	any Door Ajar - HSD output	17	VT/OR	0.5	open circuit when all doors are closed, battery positive voltage (12V) when any door is ajar

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#	Connector Identity	Circuit #	Upfitters Signal	Cavity #	Wire Color	Max. Amps	Function
15	Black 16-cavity	*W505	howler Siren disable - HSD output	1	LG	0.25	open circuit when vehicle speed is below 25MPH, battery positive voltage (12V) when vehicle speed is 25MPH or above
16	Black 16-cavity	*W513	Horn activation - HSD output	2	BR/GY	0.5	open circuit when horn not pressed (not energized), battery positive voltage (12V) when pressed (energized)
17	Black 16-cavity	*W517	side Airbag deployed - HSD output	3	BR/LG	0.5	open circuit when side airbags have not deployed during current key cycle, battery positive voltage (12V) upon airbag deployment during current key cycle
18	Black 16-cavity	*W662	Tire Pressure Monitor active - HSD output (applicable only to RAM 2500 under 10,000 GVW)	4	VT/YL	0.5	open circuit when the Tire Pressure Monitor (TPM) indicator lamp is off, battery positive voltage (12V) when the TPM indicator lamp is active
19	Black 16-cavity	*W735	Power feed, "Off" - HSD output	5	PK	0.5	open circuit when key position is in "Accessory/Run/Start", battery positive voltage (12V) when key position is in "Off"
20	Black 16-cavity	*W710	driver's Seat Belt not latched - HSD output	6	LG/VT	0.25	open circuit when the drivers seat belt is latched, battery positive voltage (12V) when the drivers seat belt is not latched
21	Black 16-cavity	#W707	Oil Pressure warning signal - LSD digital output	7	VT/GY	0.1	oil pressure signal: Pulse Width Modulation (PWM) between open circuit and battery negative voltage (0V), 100Hz, linear with 0% PWM =0PSI, and 100% PWM=147PSI
22	Black 16-cavity	#W733	Voltage gauge - LSD digital output	8	VT	0.5	battery voltage signal: Pulse Width Modulation (PWM) between open circuit and battery negative voltage (0V), 100Hz, linear with 0% PWM =5V, and 100% PWM=18V
23	Black 16-cavity	*W518	front Airbag deployed - HSD output	9	BR/DG	0.5	open circuit when front airbags have not deployed during current key cycle, battery positive voltage (12V) upon airbag deployment during current key cycle
24	Black 16-cavity	*W515	Panic Alarm activation - HSD output	10	BR/LB	0.5	open circuit when panic alarm is not active, battery positive voltage (12V) when panic alarm is active
25	Black 16-cavity	*W726	Service Brake pedal depressed - HSD output	11	DG/OR	0.25	open circuit when the service brake pedal is not pressed, battery positive voltage (12V) when the brake pedal is depressed
26	Black 16-cavity	*W734	Power feed, "Accessory" - HSD output	12	PK/GY	0.5	open circuit when key position is in "Off/Run/Start", battery positive voltage (12V) when key position is in "Accessory"

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#	Connector Identity	Circuit #	Upfitters Signal	Cavity #	Wire Color	Max. Amps	Function
27	Black 16-cavity	*W736	Power feed, "Run" - HSD output	13	PK/YL	0.5	open circuit when key position is in "Off/Accessory/Start", battery positive voltage (12V) when key position is in "Run"
28	Black 16-cavity	#W538	Fuel level signal LSD digital output	14	BR/OR	0.1	fuel level signal: Pulse Width Modulation (PWM) between open circuit and battery negative voltage (0V), 100Hz, linear with 0% PWM = empty tank, and 100% PWM = full tank
29	Black 16-cavity	#W744	engine RPM signal - LSD digital output	15	BR/WT	0.25	engine RPM signal: modulation between open circuit and battery negative voltage (0V), output with 0.2Hz/RPM (12 pulses per minute per 1 RPM) @ 50% duty cycle
30	Black 16-cavity	#W524	vehicle MPH speed signal, LSD digital output	16	BR/YL	0.1	vehicle speed signal: modulation between open circuit and battery negative voltage (0V), output with 10Hz/MPH (600 pulses per minute per 1 MPH) 50% duty cycle
31	Brown 16-cavity	#W521	Cluster/Auxiliary lighting dimmer, LSD digital output	1	BR/WT	0.1	using the vehicles instrument cluster dimmer control - will dim auxiliary lighting: PWM between open circuit and battery negative voltage (0V), 100Hz, linear with 0%PWM = zero intensity, and 100%PWM = full intensity
32	Brown 16-cavity	W722	Door Lock double lock function - "Unlock" all, LSD output	2	DG/TN	0.5	relay driver, mirrors vehicle unlock request with a battery negative voltage (0V) for 500ms Note: only on vehicles built prior to 5/9/2013 the first press of the door "unlock" switch unlocks the vehicle, a second press sends the unlock signal to this circuit; 5/9/2013 and later vehicles will require only one switch press
33	Brown 16-cavity	W503	Auxiliary upfitter added flashing lights front output, LSD output	3	TN/VT	0.25	relay driver for front auxiliary light(s), open circuit when W500 is "OFF", flash on/off at 80 flashes per minute (1.333Hz square wave @ 50% duty cycle) when W500 is "ON"
34	Brown 16-cavity	W506	auxiliary Cargo Lamp switch signal - digital input	4	WT	--	cargo lamp ON/OFF, use N.O. switch to ground to activate a relay via W711, times out after 30 minutes, re-enable by cycling switch
35	Brown 16-cavity	W501	Wig Wag switch signal rear, digital input	5	BR/VT	--	when grounded actuates Wig Wag vehicle rear stop/turn lamps, 80 flashes per minute (1.3Hz square wave @ 50% duty cycle), also actuates circuit W502
	Brown 16-cavity			6	GY	--	this wire is included in the VSIM upfitter harness but is not used

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#	Connector Identity	Circuit #	Upfitters Signal	Cavity #	Wire Color	Max. Amps	Function
36	Brown 16-cavity	W708	PTO pressure switch - digital input	8	OR/BR	--	**MANDATORY CIRCUIT FOR PTO USEAGE** When grounded via PTO pressure switch, provides feedback to the vehicle that the PTO has pressure; controls PTO actuation and vehicles dash PTO switch LED illumination status
37	Brown 16-cavity	W721	Door Lock double lock function - "Lock" all, LSD output	9	LG/TN	0.5	relay driver, mirrors vehicle lock request with a battery negative voltage (0V) for 500ms Note: only on vehicles built prior to 5/9/2013 the first first press of the door "lock" switch locks the vehicle, a second press sends the lock signal to this circuit; 5/9/2013 and later vehicles will require only one switch press
38	Brown 16-cavity	W502	Auxiliary upfitter added flashing lights rear output, LSD output	10	TN/BR	0.25	relay driver for rear auxiliary light(s), open circuit when W501 is "OFF", flash on/off at 80 flashes per minute (1.333Hz square wave @ 50% duty cycle) when W501 is "ON"
39	Brown 16-cavity	W725	Park Brake applied - LSD output	11	DG/WT	0.5	relay driver, open circuit when park brake not set, battery negative voltage (0V) when park brake set
40	Brown 16-cavity	W500	Wig Wag switch signal front lights, digital input **NOTE**: this function must **not** be used on Laramie, Long Horn, nor 7X91 sales code Power Wagon's - all of which which are equipped with Projector Headlamps (sales code LMC)	12	BR/OR	--	when grounded actuates Wig Wag vehicles front high beams, 80 flashes per minute (1.3Hz square wave @ 50% duty cycle), also actuates circuit W503
41	Brown 16-cavity	W537	Panic Alarm mute switch signal - digital input	13	BR/OR	--	when grounded mutes the vehicle horns during "Panic Alarm" active (via vehicles CAN messaging)
42	Brown 16-cavity	W536	Horn switch mute - digital input	14	BR/YL	--	when grounded mutes the vehicle horns (via vehicles CAN messaging)
	Brown 16-cavity			15	OR		this wire is included in the VSIM upfitter harness but is not used
43	Brown 16-cavity	W709	Ground - ground return	16	BK	--	a source for negative battery voltage (0V) **for use on VSIM switched digital inputs only**
44	Green 16-cavity	W544	Split Shaft PTO - digital input	2	GY	--	when grounded signals the controller it's OK to initiate split shaft PTO
	Green 16-cavity			3	DB		this wire is included in the VSIM upfitter harness but is not used
45	Green 16-cavity			4	WT/BR	--	this wire is included in the VSIM upfitter harness but is not used

#	Connector Identity	Circuit #	Upfitters Signal	Cavity #	Wire Color	Max. Amps	Function
46	Green 16-cavity	W541	PTO idle speed 1 - digital input	5	GY/OR	--	***NOTE**: vehicle must have been built with PTO option sales code LBN or LBV for the cluster to have the necessary programing software for this feature.* When grounded sets the PTO Remote 1 RPM (Set the desired RPM for this circuit by using the instrument cluster programing screen, select: PTO/Remote/RPM Preset 1 - then set the desired RPM); speed 1 trumps F425 @ 900RPM and speeds 2&3; RPM up/down ramp rate is 200RPM/sec.
47	Green 16-cavity	W543	PTO idle speed 3 - digital input	6	GY/YL	--	***NOTE**: vehicle must have been built with PTO option sales code LBN or LBV for the cluster to have the necessary programing software for this feature.* When grounded sets the PTO Remote 3 RPM (Set the desired RPM for this circuit by using the instrument cluster programing screen, select: PTO/Remote/RPM Preset 3 - then set the desired RPM), speed 3 trumps F425 @ 900RPM; is trumped by speeds 1 or 2; RPM up/down ramp rate is 200RPM/sec.
48	Green 16-cavity	*W742	Throttle Valve actuator signal - HSD output	7	BR/OR	0.5	open circuit when Electronic Throttle indicator is not illuminated, battery positive voltage (12V) when Electronic Throttle indicator is illuminated
	Green 16-cavity			11	LB		this wire is included in the VSIM upfitter harness but is not used
49	Green 16-cavity	W546	Separated rear tail lighting - digital input	12	TN/GY	--	when grounded rear stop/turn lamps become turn only (via CAN message)
50	Green 16-cavity	W542	PTO idle speed 2 - digital input	13	GY/BR	--	***NOTE**: vehicle must have been built with PTO option sales code LBN or LBV for the cluster to have the necessary programing software for this feature.* When grounded sets the PTO Remote 2 RPM (Set the desired RPM for this circuit by using the instrument cluster programing screen, select: PTO/Remote/RPM Preset 2 - then set the desired RPM); speed 2 trumps F425 @ 900RPM, is trumped by speed 1 but trumps speed 3; RPM up/down ramp rate is 200RPM/sec.
51	Green 16-cavity	*W522	engine running Hour Meter - HSD output	14	BR/VT	0.5	open circuit when engine RPM <450, battery positive voltage (12V) when RPM >450
52	Green 16-cavity	*W699	Park Lamp on - HSD output	15	WT/LG	0.5	open circuit when park lamps are not on, battery positive voltage (12V) when park lamps are on
			1. LSD=low side driver HSD=high side driver				
			2. within a bundle one wire of two duplicate colors will be labeled with its circuit number, the non-labeled wire will be the other circuit number with that color				
			3. **readable CAN messages are delineated on the separate CAN spreadsheet; "DBC" files available via request to the rambbg@chrysler.com.				

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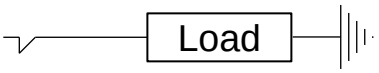
*CIRCUIT "PAIRS"

2	gray 24-cavity	*W504	Transmission out of "park" - HSD output	3	BR	**If only one of this circuit pair is being used as an output, the other unused circuit must be grounded thru a 1kΩ, ≥0.5W resistor; see "Pairs" Circuit Example circuit diagram.
5	gray 24-cavity	*W540	MIL lamp on - HSD output	6	BR/DG	
16	Black 16-cavity	*W505	howler Siren disable - HSD output	1	LG	**If only one of this circuit pair is being used as an output, the other unused circuit must be grounded thru a 1kΩ, ≥0.5W resistor; see "Pairs" Circuit Example circuit diagram.
24	Black 16-cavity	*W518	front Airbag deployed - HSD output	9	BR/DG	
17	Black 16-cavity	*W513	Horn activation - HSD output	2	BR/GY	**If only one of this circuit pair is being used as an output, the other unused circuit must be grounded thru a 1kΩ, ≥0.5W resistor; see "Pairs" Circuit Example circuit diagram.
25	Black 16-cavity	*W515	Panic Alarm activation - HSD output	10	BR/LB	
18	Black 16-cavity	*W517	side Airbag deployed - HSD output	3	BR/LG	**If only one of this circuit pair is being used as an output, the other unused circuit must be grounded thru a 1kΩ, ≥0.5W resistor; see "Pairs" Circuit Example circuit diagram.
26	Black 16-cavity	*W726	Service Brake pedal depressed - HSD output	11	DG/OR	
19	Black 16-cavity	*W662	Tire Pressure Monitor active - HSD output (applicable only to RAM 2500 under 10,000 GVW)	4	VT/YL	**If only one of this circuit pair is being used as an output, the other unused circuit must be grounded thru a 1kΩ, ≥0.5W resistor; see "Pairs" Circuit Example circuit diagram.
27	Black 16-cavity	*W734	Power feed, "Accessory" - HSD output	12	PK/GY	
20	Black 16-cavity	*W735	Power feed, "Off" - HSD output	5	PK	**If only one of this circuit pair is being used as an output, the other unused circuit must be grounded thru a 1kΩ, ≥0.5W resistor; see "Pairs" Circuit Example circuit diagram.
28	Black 16-cavity	*W736	Power feed, "Run" - HSD output	13	PK/YL	
21	Black 16-cavity	*W710	driver's Seat Belt not latched - HSD output	6	LG/VT	**If only one of this circuit pair is being used as an output, the other unused circuit must be grounded thru a 1kΩ, ≥0.5W resistor; see "Pairs" Circuit Example circuit diagram.
53	Green 16-cavity	*W522	engine running Hour Meter - HSD output	14	BR/VT	
50	Green 16-cavity	*W742	Throttle Valve actuator signal - HSD output	7	BR/OR	**If only one of this circuit pair is being used as an output, the other unused circuit must be grounded thru a 1kΩ, ≥0.5W resistor; see "Pairs" Circuit Example circuit diagram.
54	Green 16-cavity	*W699	Park Lamp on - HSD output	15	WT/LG	

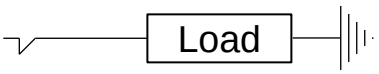
"Pairs" Circuit Example

If either circuit of a "pair" is used, one of the circuit diagrams below must be used.

Circuit W504



Circuit W540



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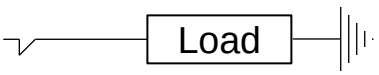
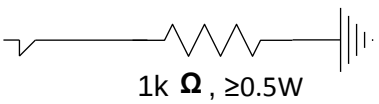
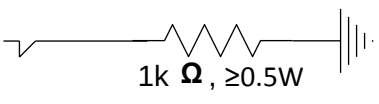


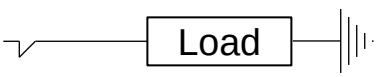
Circuit W540



Circuit W504



Circuit W540



Load = LED, incandescent bulb, upfitter module input, relay coil, etc.

*When a resistor is required, it can only be used on one circuit; I.E., two circuits require two resistors, three circuits require three resistors, etc.

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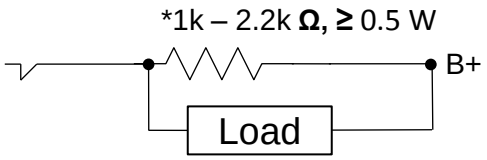
#"PULL-UP" RESISTORS REQUIRED - EXTERNAL						
32	Brown 16-cavity	#W521	Cluster/Auxiliary lighting dimmer, LSD digital output	1	BR/WT	*This circuit requires a dedicated 1K-2.2KΩ, ≥0.5W pull-up resistor connected from this circuits wire to a +12V source. See the "Pull-Up" Resistor Circuits diagram. For Chassis cabs, +12V can be obtained from splicing into circuit F606 at location "D" as shown in the schematic within the UPFITTER WIRING INTERFACE INSTRUCTIONS chapter. For HD Pick-Ups, +12V can be obtained at the wiring to the cigarette lighter or another +12V source.
31	Black 16-cavity	#W524	vehicle MPH speed signal, LSD digital output	16	BR/YL	*This circuit requires a dedicated 1K-2.2KΩ, ≥0.5W pull-up resistor connected from this circuits wire to a +12V source. See the "Pull-Up" Resistor Circuits diagram. For Chassis cabs, +12V can be obtained from splicing into circuit F606 at location "D" as shown in the schematic within the UPFITTER WIRING INTERFACE INSTRUCTIONS chapter. For HD Pick-Ups, +12V can be obtained at the wiring to the cigarette lighter or another +12V source.
29	Black 16-cavity	#W538	Fuel level signal LSD digital output	14	BR/OR	*This circuit requires a dedicated 1K-2.2KΩ, ≥0.5W pull-up resistor connected from this circuits wire to a +12V source. See the "Pull-Up" Resistor Circuits diagram. For Chassis cabs, +12V can be obtained from splicing into circuit F606 at location "D" as shown in the schematic within the UPFITTER WIRING INTERFACE INSTRUCTIONS chapter. For HD Pick-Ups, +12V can be obtained at the wiring to the cigarette lighter or another +12V source.
22	Black 16-cavity	#W707	Oil Pressure warning signal - LSD digital output	7	VT/GY	*This circuit requires a dedicated 1K-2.2KΩ, ≥0.5W pull-up resistor connected from this circuits wire to a +12V source. See the "Pull-Up" Resistor Circuits diagram. For Chassis cabs, +12V can be obtained from splicing into circuit F606 at location "D" as shown in the schematic within the UPFITTER WIRING INTERFACE INSTRUCTIONS chapter. For HD Pick-Ups, +12V can be obtained at the wiring to the cigarette lighter or another +12V source.
23	Black 16-cavity	#W733	Voltage gauge - LSD digital output	8	VT	*This circuit requires a dedicated 1K-2.2KΩ, ≥0.5W pull-up resistor connected from this circuits wire to a +12V source. See the "Pull-Up" Resistor Circuits diagram. For Chassis cabs, +12V can be obtained from splicing into circuit F606 at location "D" as shown in the schematic within the UPFITTER WIRING INTERFACE INSTRUCTIONS chapter. For HD Pick-Ups, +12V can be obtained at the wiring to the cigarette lighter or another +12V source.
30	Black 16-cavity	#W744	engine RPM signal - LSD digital output	15	BR/WT	*This circuit requires a dedicated 1K-2.2KΩ, ≥0.5W pull-up resistor connected from this circuits wire to a +12V source. See the "Pull-Up" Resistor Circuits diagram. For Chassis cabs, +12V can be obtained from splicing into circuit F606 at location "D" as shown in the schematic within the UPFITTER WIRING INTERFACE INSTRUCTIONS chapter. For HD Pick-Ups, +12V can be obtained at the wiring to the cigarette lighter or another +12V source.
						*Each circuit requiring a "Pull-Up" resistor must use a resistor dedicated only to one circuit.

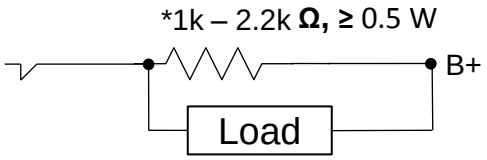
"Pull - Up" Resistor Circuits

Circuits

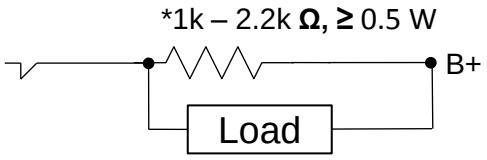
Circuit W521



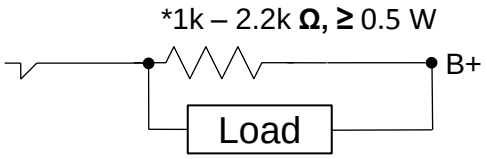
Circuit W524



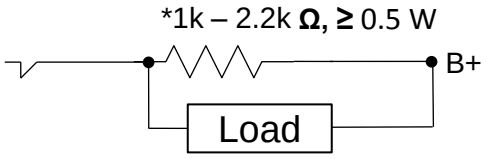
Circuit W538



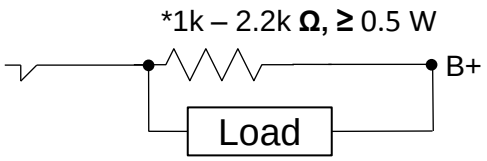
Circuit W707



Circuit W733



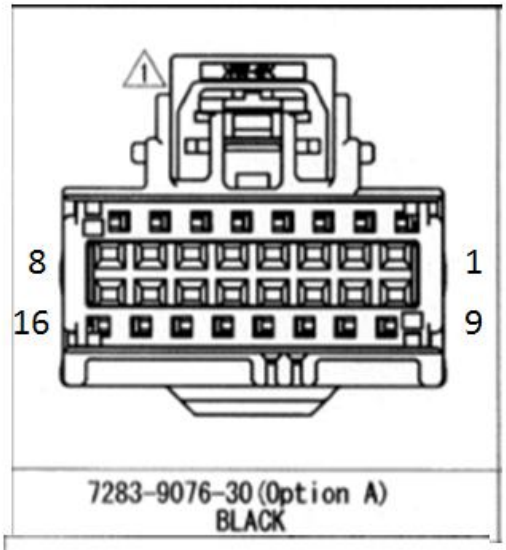
Circuit W744



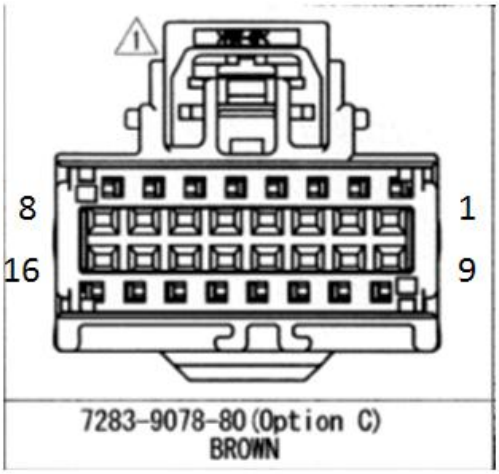
Load = upfitter module input

* A separate "Pull-Up" resistor must be used for each individual circuit.

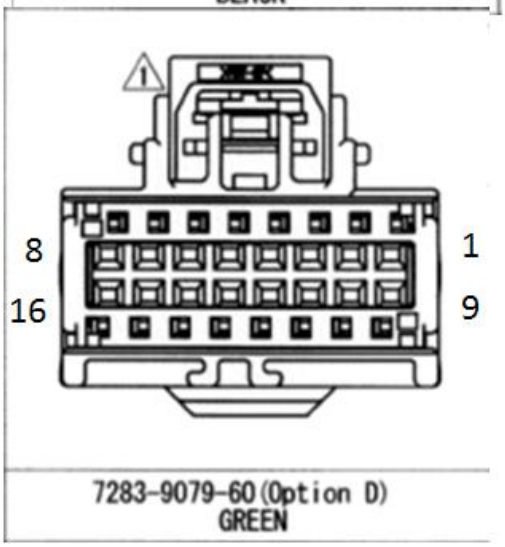
2013 Chassis Cab VSIM Usage Instructions



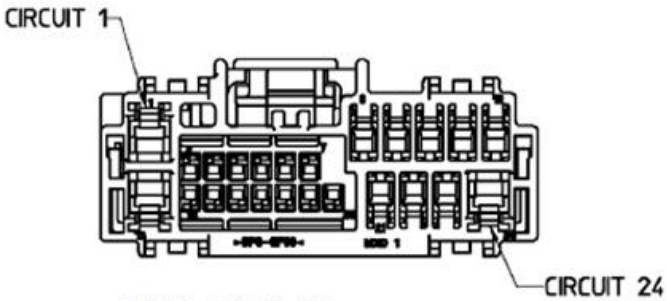
7283-9076-30 (Option A)
BLACK



7283-9078-80 (Option C)
BROWN



7283-9079-60 (Option D)
GREEN



7283-9491-40 -
GRAY

2013 Chassis Cab VSIM Usage Instructions

2013 VSIM CAN BUS Messages

#	Name	Unit	Comment	FlexKomComment	FlexKomSigName
1	WakeupRsn_VSIM		Wakeup reason VSIM	Mode 2 of NM_Ud_Srv	Wakeup_VSIM
2	WakeupCnt		Counter for module wakeup states during network sleep	Mode 2 of NM_Ud_Srv	Wakeup_VSIM
3	VIN_MSG		VIN Message Information	Vin Information	VIN_INFO
4	VEH_SPEED	km/h	Vehicle speed	Vehicle speed	VEH_SPEED
5	RT_DIST	cm	Distance Traveled by Right Wheel	Distance traveled by wheels	ESP_DIST
6	PRND_STAT		PRND Status	PRND Status	PRND_STAT
7	PANEL_INTS	%	Panel-/display intensity	Interior lighting status (VSIM bus)	Int_LT_Stat
8	OIL_PRESS	kPaG	Oil pressure	Oil pressure	OIL_PRESS
9	ODO	km	Odometer	Odometer	ODO
10	Nw_Id		Network identification no.	Network identification no.	Nw_Id
11	NM_Ud_Srv		Network management userdata service no.	Network management state	NM
12	NM_Ud_Launch		Network management userdata launch type	Network management state	NM
13	NM_Successor		Network management logical successor	Network management state	NM
14	NM_Mode		Network management mode	Network management state	NM
15	MIL_LMP_STAT		Malfunction indicator lamp status	Malfunction indicator lamp status	MIL_LMP_STAT
16	LT_DIST	cm	Distance Traveled by Left Wheel	Distance traveled by wheels	ESP_DIST
17	HL_SW_MODE		Headlamp switch mode	Headlamp switch mode	HL_SW_MODE
18	EngHours	Hours	Engine hours	Engine hours	EngHours
19	ENG_RPM	rpm	Engine revolutions per minute	Engine revolutions per minute	ENG_RPM
20	DRV_SEATBELT		Drivers seat belt status	Drivers seat belt status	DRV_SEATBELT
21	CmdIgnStat		Commanded ignition switch status	Commanded ignition switch status	CmdIgnStat
22	BRK_SW		Brake switch status	Brake switch status	BRK_SW
23	BATT_VOLT	Volts	System voltage	System voltage	BATT_VOLT
24	AvgFuelLvl	liters	Average filtered fuel level in liters	Average filtered fuel level in liters	AvgFuelLvl
25	X_IMPACT		Any impact event (VSIM bus)	Impact events (VSIM bus)	Impact
26	AudMuteRq		Audio mute request from VSIM	Audio mute request from VSIM	AudMuteRq
27	DAY_LGT_MD		Day light brightness mode	Night=[0], Day=[1]	Interior lighting status (VSIM bus)
28	DRV_AJAR		Driver door ajar	Door ajar	DR_AJAR
29	FtWigWagRq		Front wig wag request	Exterior lighting wig wag packet	WigWagPkt
30	HORN_RQ		Horn On Request = [1]	Horn On Request = [1]	HORN_RQ
31	L_R_AJAR		Left rear door ajar	Door ajar	DR_AJAR
32	Impact_F		Less severe front event	Impact events (VSIM bus)	Impact
33	NM_Outfitter		Network management	Network management	NM_Outfitter
34	NM_Sleep_Ack		Network management sleep acknowledge	Network management state	NM
35	NM_Sleep_Ind		Network management sleep indication	Network management state	NM
36	PNC_ALM_MUTE		Panic alarm mute	Panic alarm mute	PNC_ALM_MUTE
37	PNC_MD_ACT		Panic mode active	Panic mode active	PNC_MD_ACT
38	PARK_LMP_ON		Parklamps are on	off=[0], on=[1]	Parklamps are on
39	PSG_AJAR		Passenger door ajar	Door ajar	DR_AJAR
40	RrWigWagRq		Rear wig wag request	Exterior lighting wig wag packet	WigWagPkt
41	R_R_AJAR		Right rear door ajar	Door ajar	DR_AJAR
42	Awake_Diag_Actv		Stay awake for diagnostics active	Mode 15 of NM_Ud_Srv	Awake_VSIM
43	Awake_NwSt		Stay awake for network startup	Mode 15 of NM_Ud_Srv	Awake_VSIM
44	SupHrnRq		Suppress horn request	Suppress horn request	SupHrnRq
45	LT_TURN_ON		Turn indication left is on	Turn indication status	TURN_STAT
46	RT_TURN_ON		Turn indication right is on	Turn indication status	TURN_STAT
47	VIN_DATA		VIN Digits (8 bit ascii encoded)	Vin Information	VIN_INFO