



Sprinter PSM Software Safety & Security Standard Software Package

Commercial Vans PSM Support

Mercedes-Benz
Vans. Born to run.



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I further understand, agree and acknowledge that Mercedes-Benz does not take responsibility for any issues and problems which relate to or result from Upfitter's use of the PSM as part of its vehicle modifications or from the features, functions, and signals provided by the PSM related to Upfitter's modifications which are not compliant with all applicable Federal, State and local laws and regulations, as well as the BEG and all other Mercedes-Benz technical bulletins and information found on the Upfitter Portal or otherwise communicated by Mercedes-Benz. Mercedes Benz, to the fullest extent permitted under the law, disclaims all express and implied warranties related to the Upfitter's modifications and use of the PSM.

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This bulletin is not intended to serve as a work instruction, but merely to provide some helpful information for Upfitters to take into consideration before retrofitting or modifying a Mercedes-Benz Sprinter Van.

Prior to making any modification to or installing any equipment in or on a Mercedes-Benz or Freightliner Sprinter, you should review and ensure compliance with all applicable laws and regulations, consult with Vans Engineering Support for Upfitter Management for additional and updated information, and read the Body & Equipment Guidelines for Sprinter Model Series 906.

The PSM software is a customized and tailored software solution designed for a specific customer application matched to a specific Sprinter model configuration.

Exception: Factory Options M53, MT4 and T57 have factory PSM software installed

For more information or upfit inquiries, please visit www.UpfitterPortal.com

Wiring Information

To ensure reliable electrical connections proper electrical contacts and crimping methods must be utilized. All PSM connections should be made using the following parts:

Contacts

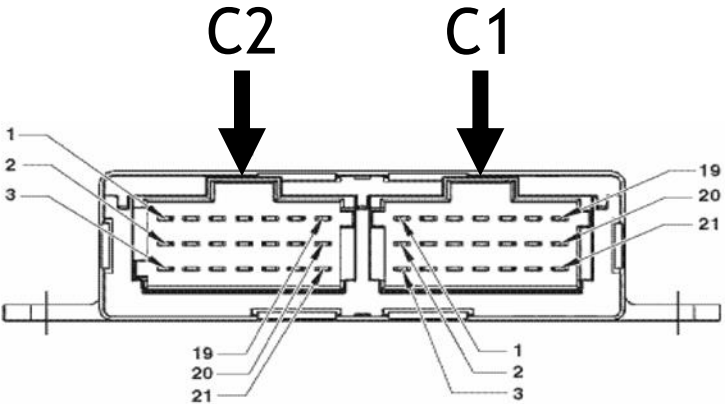
Connector	Mercedes-Benz Part Number	Manufacturer	Manufacturer Part Number	Wire Size
1 & 2	A015 545 04 26	AMP - TE	* 1-968895-X (Loose)	32 - 22 AWG (.2 - .5mm)
			* 1-968880-X (Strip Form)	
	A013 545 76 26	AMP - TE	* 1-968872-X (Loose)	22 - 18 AWG (.5 - 1mm)
			* 1-968849-X (Strip Form)	
	A013 545 78 26	AMP - TE	* 1-968873-X (Loose)	18 - 14 AWG (1 - 2.5mm)
			* 1-968851-X (Strip Form)	

Crimping

Item	Mercedes-Benz Part Number	Manufacturer	Manufacturer Part Number	Wire Size
Crimper	220 589 01 99 10	AMP - TE	539635-1	-
Positioner	000 589 13 99 21	AMP - TE	539721-2	32 - 22 AWG (.2 - .5mm)
		AMP - TE	539722-2	22 - 18 AWG (.5 - 1mm)
		AMP - TE	539723-2	18 - 14 AWG (1 - 2.5mm)

Contact Removal

Item	Mercedes-Benz Part Number	Manufacturer	Manufacturer Part Number
Handle	220 589 01 99 50	AMP - TE	1579007-1
Attachment	000 589 13 99 30		

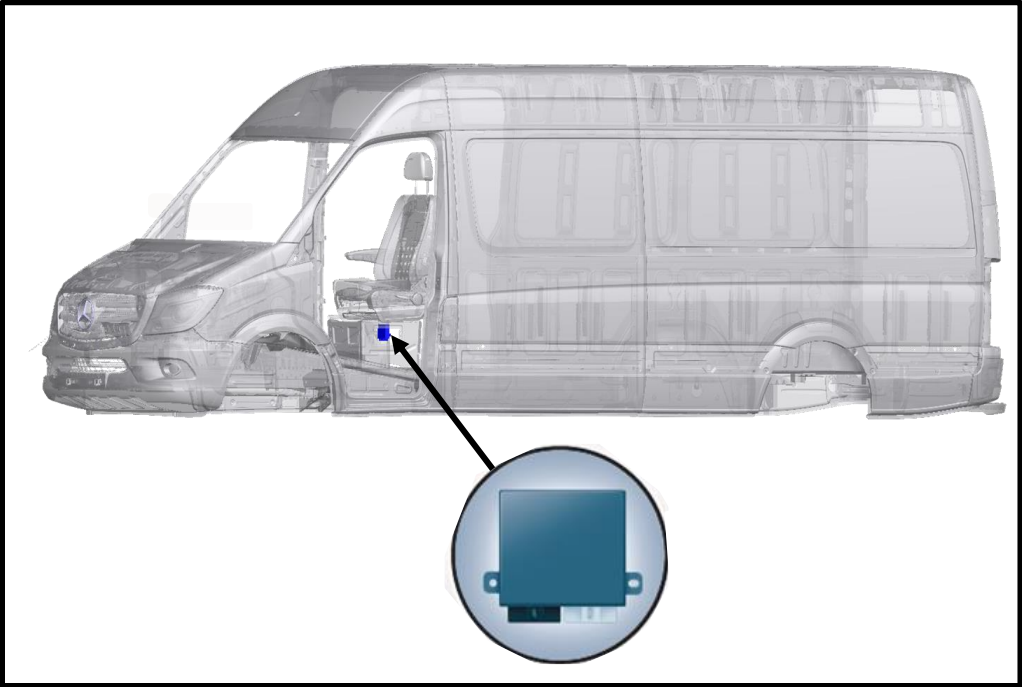


* X Indicates Contact Finish (1 - Tin, 2 - Gold, 3 - Silver [preferred])

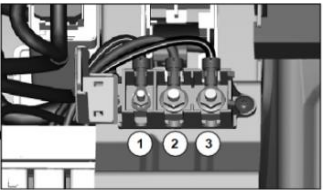
Safety & Security Software Specifications

In addition to supporting vehicle with standard option codes (M53, MT4, and/ or T57) the following software package is designed to provide access to vehicle information relevant to the security of the vehicle (Doors Open, P Brake Engaged, etc.) as well as provide safety relevant functions to the Upfitter (Lock/Unlock Load Compartment, Horn, Engine Start/Stop, Starter Lockout, etc.).

This package is also capable of supporting a Mobility Lift Interlock solution (M53 or MT4 required).



Additional info: EK1 – Auxiliary electrical connector under driver's seat



Terminal	U [V] / I [A]	wire color
1 st power with engine running	12V / 10A	blue/yellow
2 nd battery direct power	12V / 25A	red/gray
3 rd ignition power	12V / 15A	black/yellow

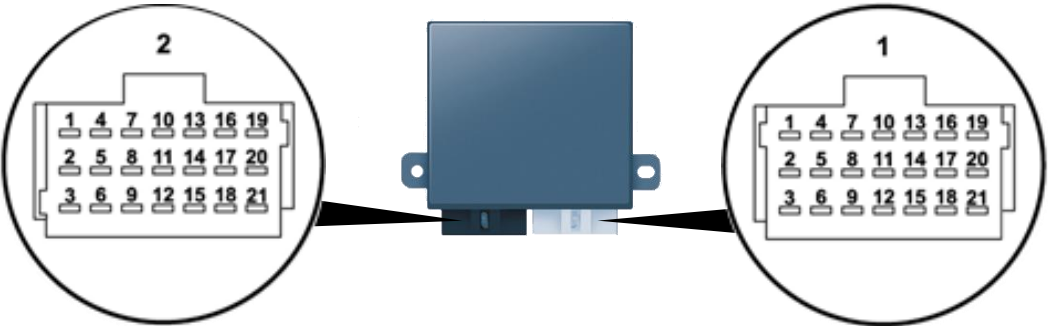
Input Specification

Input Signal	Connector	Pin	Trigger Type	Comments
Unlock Load Compartment	2	11	Low Side	
Lock Load Compartment	1	14	Low Side	
Activate Horn	2	1	Low Side	
Starter Lockout	2	4	High Side	See Starter Lockout Function Specification
Start Engine	2	6	High Side	See Engine Start Function Specification
Stop Engine	2	7	High Side	See Engine Stop Function Specification
Enable Interlock	1	2	Low Side	See Interlock Function Specification
High Idle Switch	2	13	Low Side	Standard With Options M53/MT4
High Idle Control Button	2	10	High Side	
Step Extended Switch	2	2	Low Side	Standard With Option T57
Step Retracted Switch	2	5	Low Side	
Pinch Protection Switch	2	14	Low Side	
Step Motor	2	8	High Side	

Low Side values activate the signal upon application of Ground to the PSM pin and deactivate when Ground is removed.

High Side values activate the signal upon application of +12V to the PSM pin and deactivate when +12V is removed.

Vehicle Power States	
Terminal	Common Name
30	Battery Power
30r	Timed Battery Power
31	Chassis Ground
15c	Key In Ignition (Ign. Position 0)
15r	Key On (Ign. Position 1)
15x	Accessory Power (Ign. Position 2)
15	Ignition*
50	Engine Cranking
61	Engine Running
* Active during 15x, 50, and 61	



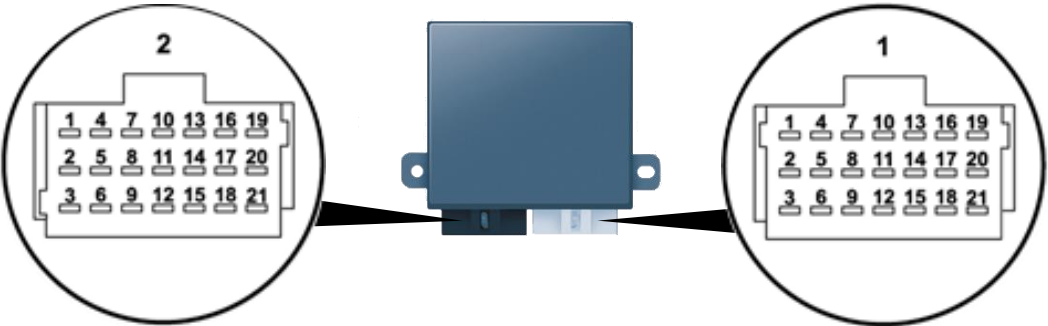
Output Specification

Output Signal	Connector	Pin	Max Amps	Output Type	Comments
Right Sliding Door Open	1	4	5	High Side	
Rear Door Open	1	7	5	High Side	
Driver Door Open	1	10	5	High Side	
Passenger Door Open	1	13	5	High Side	
Load Compartment Unlocked	1	9	0.5	High Side	
Cab Unlocked	1	12	0.5	High Side	
Standing Lights On	2	17	0.5	Low Side	
Low Beams On	1	17	1	Low Side	
Brake Lights On	1	8	1	High Side	Requires Terminal 15x or Terminal 15
Parking Brake Applied	1	11	1	High Side	
Vehicle In P	1	15	0.5	High Side	Requires Terminal 15x or Terminal 15
Interlock - Vehicle Secure	1	19	10	High Side	See Interlock - Vehicle Secure Function Specification
High Idle Switch LED	1	20	0.5	High Side	Standard With Options M53/MT4
Step Relay 2	1	16	10	High Side	Standard With Option T57
Step Relay 1	2	16	5	High Side	
Step Warning Buzzer	2	19	0.5	Low Side	

Low Side values supply Ground when activated and remove Ground when inactive.

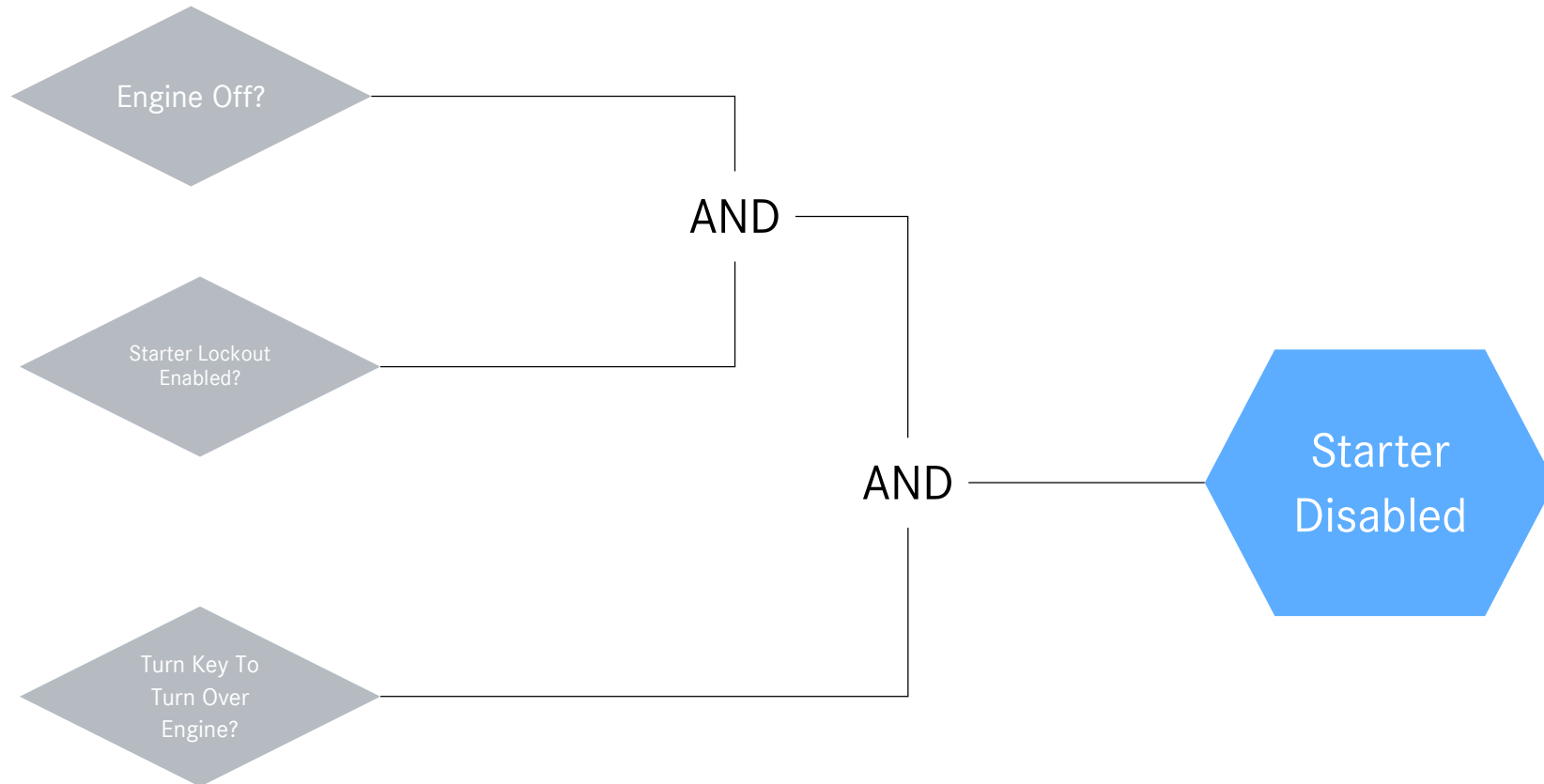
High Side values supply +12V when activated and remove +12V when inactive.

Vehicle Power States	
Terminal	Common Name
30	Battery Power
30r	Timed Battery Power
31	Chassis Ground
15c	Key In Ignition (Ign. Position 0)
15r	Key On (Ign. Position 1)
15x	Accessory Power (Ign. Position 2)
15	Ignition*
50	Engine Cranking
61	Engine Running
* Active during 15x, 50, and 61	



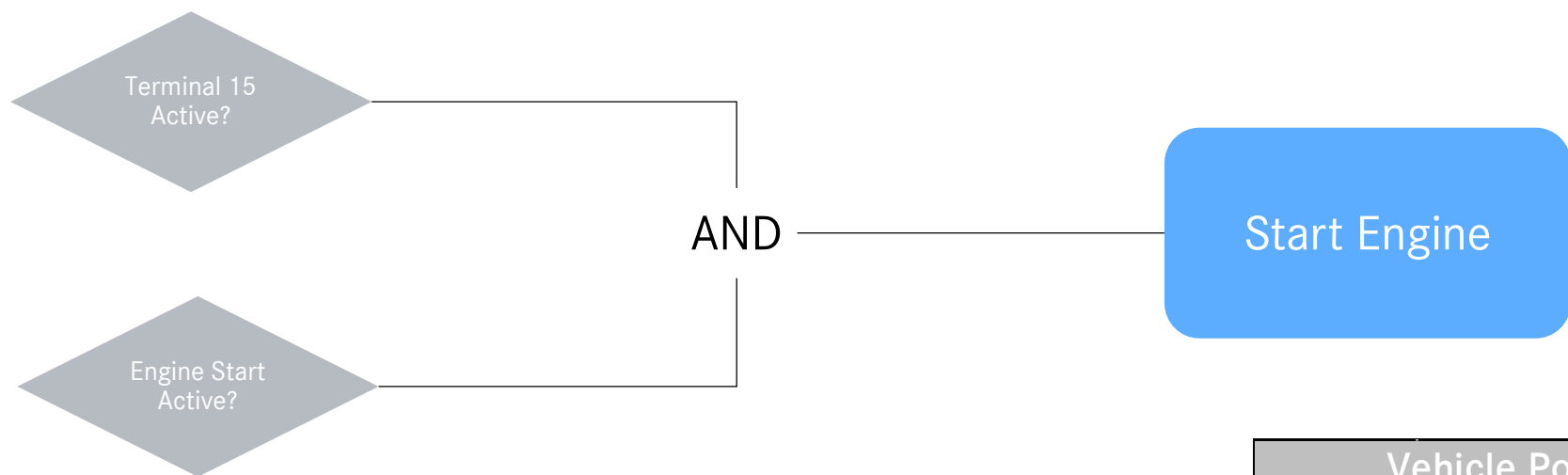
Starter Lockout

Function Specification



Engine Start

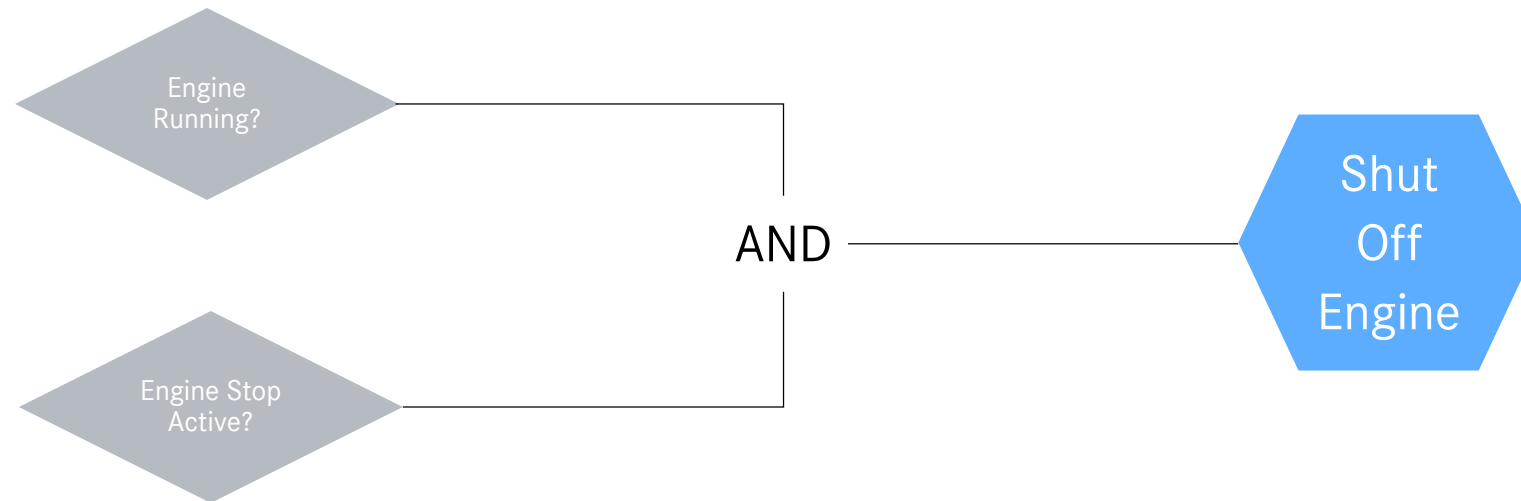
Function Specification



Vehicle Power States	
Terminal	Common Name
30	Battery Power
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15c	Key In Ignition (Ign. Position 0)
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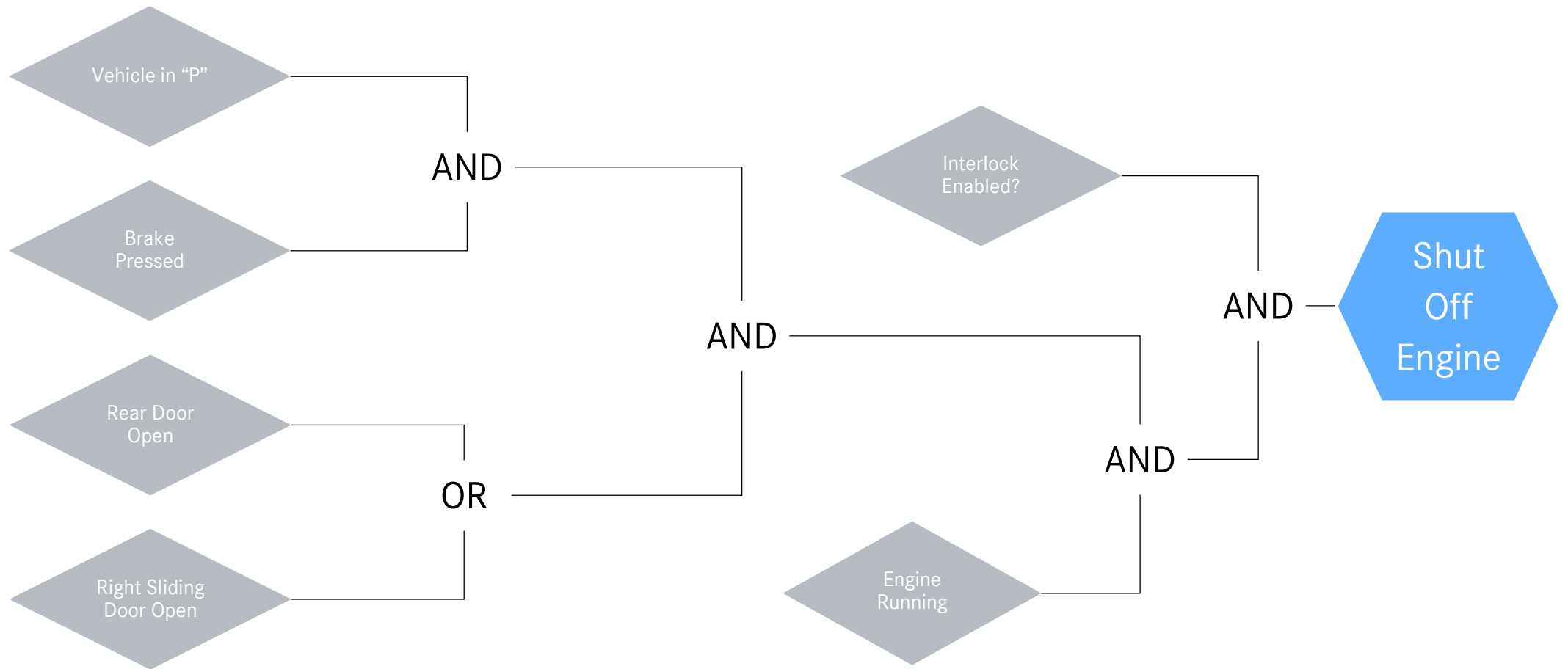
Engine Stop

Function Specification



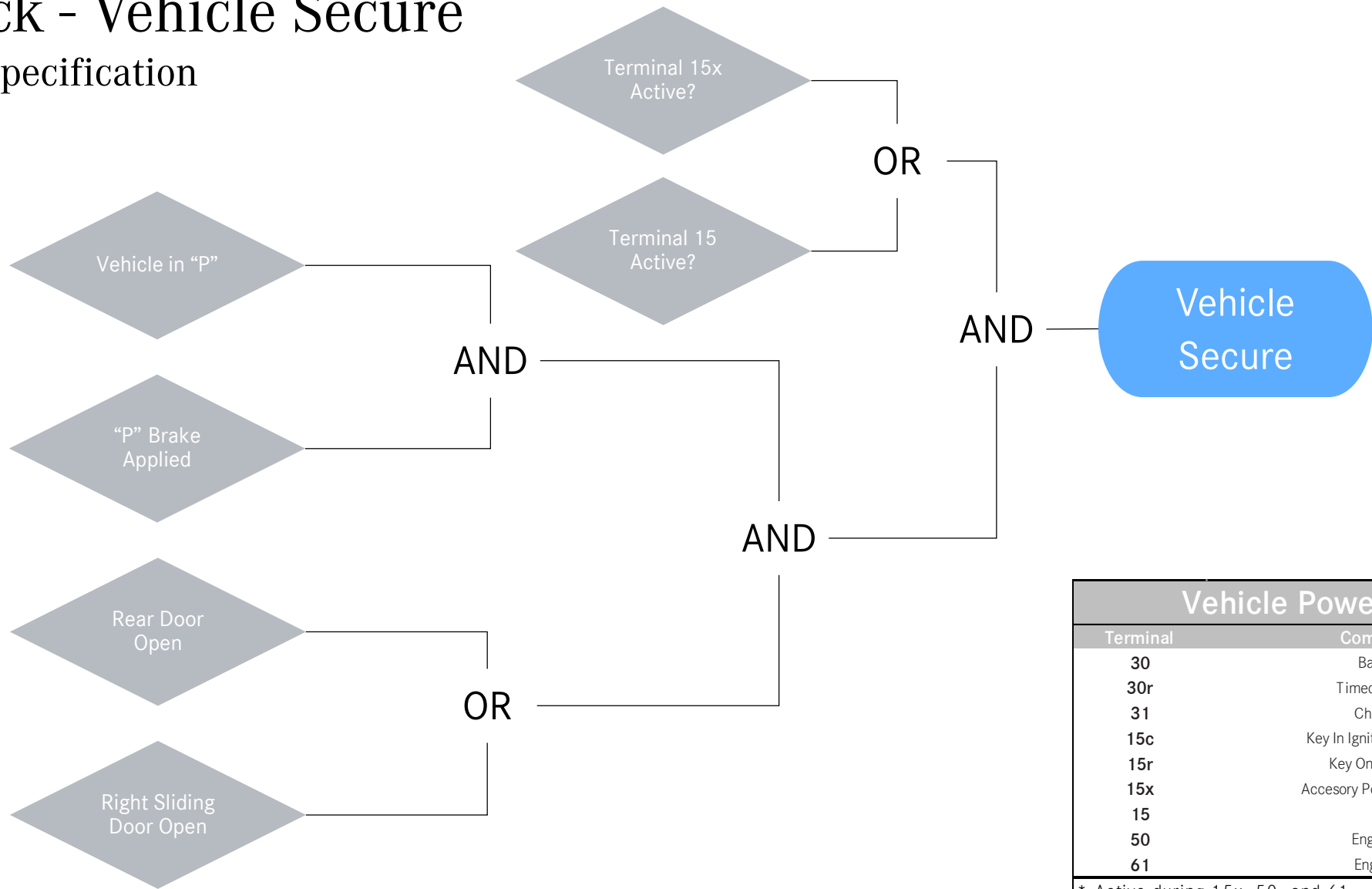
Interlock

Function Specification



Interlock - Vehicle Secure

Function Specification



Vehicle Power States	
Terminal	Common Name
30	Battery Power
30r	Timed Battery Power
31	Chassis Ground
15c	Key In Ignition (Ign. Position 0)
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15x	Accesory Power (Ign. Position 2)
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