SOFTWARE DEFINITION DOCUMENT

Rev	ERN#	Revision Description
C	CR_D2699	Replaced SW_FRONT_LOCK with SW_HATCH_LOCK
Rev By:	MPerkins	
Rev Date:	6/5/2006	
Created Date:	3/8/2004	
Created By:	MPerkins	
Checked By:	CSalagean	

EMERGENCY DOORS AND ESCAPE HATCH VANDALOCK OPERATION

D303200000

Description

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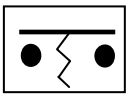
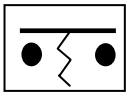
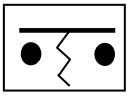
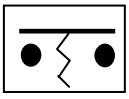
- Vandalock is enabled whenever the keyswitch is in the IGN (Ignition) or ACC (Accessory) positions.
- The Panel Buzzer and the corresponding door buzzer will sound if any Emergency Door is locked
- The Panel Buzzer will sound if the Escape Hatch is locked
- The Starter circuit will interrupt whenever any Emergency Door or Escape Hatch is locked.

Note

1. "IGN_STATUS" has been used to represent keyswitch positions IGN (Ignition) and ACC (Accessory).
2. Each Vandalock switch is optional and is "Active High".
3. This software can be used with any single or combination of Vandalock options.
4. State transition timing issues have not been considered in the simulation.

Inputs

SYSTEM INPUT	TYPE	FUNCTION	NETWORK ID		
SW_REAR_LOCK (Door Unlock State) 	**INPUT** **SPST:(Pin Switch)** • Vandalock Switch Located on Rear Emergency Door Latch Assembly	• Switch passes GND to M2/B2 Electronic Components when door is locked.	**MUX DEVICE**	**CONNECTOR**	**PIN**
			CHM	C5	B
SW_LS_LOCK (Door Unlock State) 	**INPUT** **SPST:(Pin Switch)** • Vandalock Switch Located on Left Side Exit Door Latch Assembly	• Switch passes GND to M2/B2 Electronic Components when door is locked.	**MUX DEVICE**	**CONNECTOR**	**PIN**
			EXM1	C5	G
SW_RS_LOCK (Door Unlock State) 	**INPUT** **SPST:(Pin Switch)** • Vandalock Switch Located on Right Side Exit Door Latch Assembly	• Switch passes GND to M2/B2 Electronic Components when door is locked.	**MUX DEVICE**	**CONNECTOR**	**PIN**
			CHM	C5	F
SW_HATCH_LOCK (Hatch Unlock State) 	**INPUT** **SPST:(Pin Switch)** • Vandalock Switch Located on the Escape Hatch Latch Assembly	• Switch passes GND to M2/B2 Electronic Components when door is locked.	**MUX DEVICE**	**CONNECTOR**	**PIN**
			EXM1	C5	F
ACC	**INPUT** • Vehicle Ignition Switch in ACC position. • **0=OFF, 1=ON**	• Notifies the controller that the ignition switch is in the ACC (Accessory) position.	**MUX DEVICE**	**CONNECTOR**	**PIN**
			BHM	B6	A1
IGN	**INPUT** • Vehicle Ignition Switch in IGN position. • **0=OFF, 1=ON**	• Notifies the controller that the ignition switch is in the IGN position.	**MUX DEVICE**	**CONNECTOR**	**PIN**
			BHM	B6	A3

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Outputs

OUTPUT	FUNCTION	OUTPUT TYPE	RMS CURRENT @ 12.8V	MUX DEVICE	CONNECTOR	PIN	MONITORED CIRCUIT
START_INTERRUPT	• Inhibit Controller Start Command	**System Parameter**					
PNL_BUZZER	• Switch Panel Buzzer 1 Tone A • Continuous output when engaged.	.5A HSD	.1A	SHM	J1	D	NO
LS_DOOR_BUZZER	• Left Side Door Latch Buzzer	6.7A HSD	1A	EXM1	C1	N	NO
RS_DOOR_BUZZER	• Right Side Door Latch Buzzer	6.7A HSD	1A	EXM1	C4	K	NO
REAR_DOOR_BUZZER	• Rear Door Latch Buzzer	6.7A HSD	1A	BHM	C5C	A	NO

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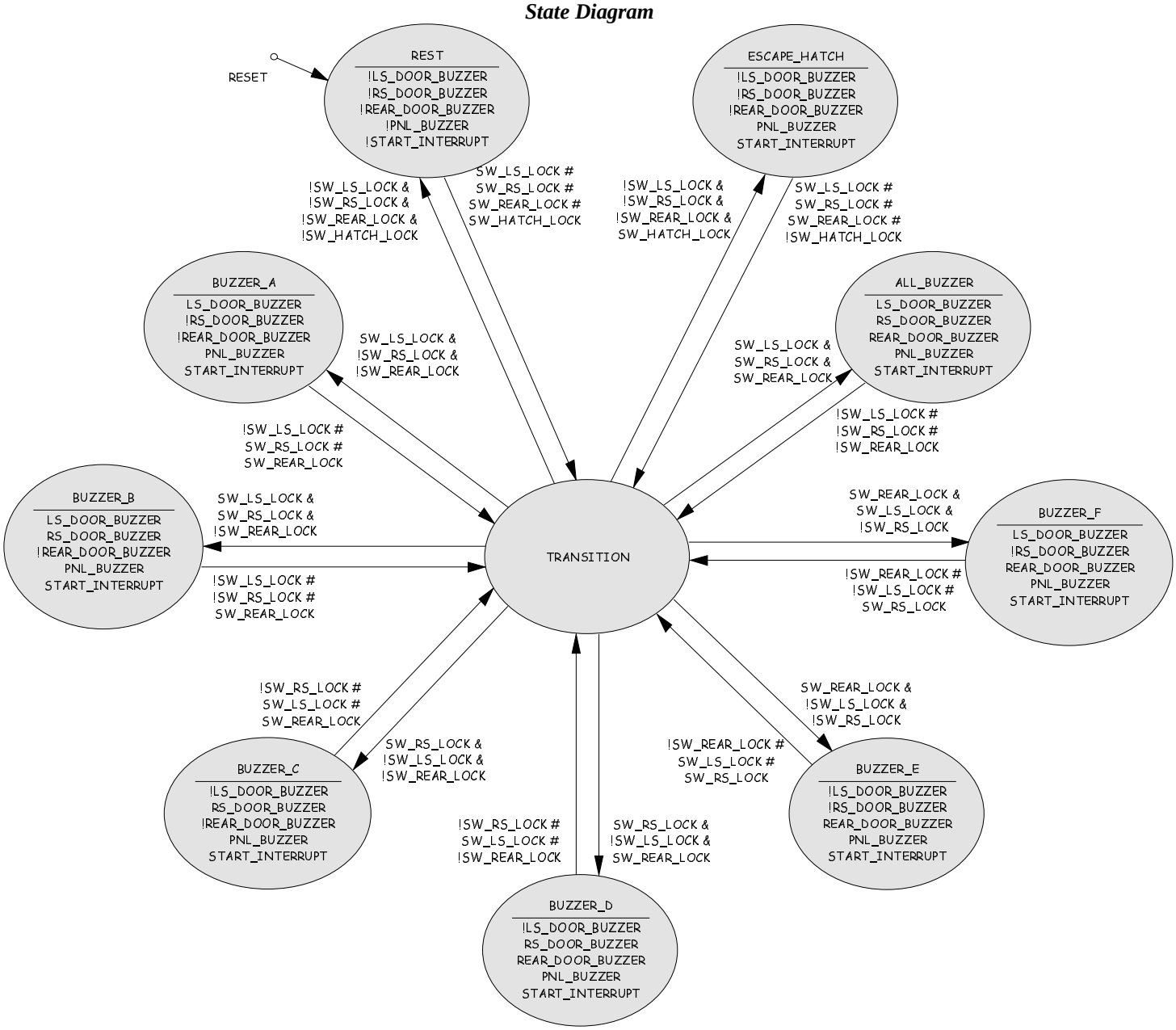
EMERGENCY DOORS AND ESCAPE HATCH
VANDALOCK OPERATION
D303200000
State Diagram



The "Transition" state is included to allow for simulation utilizing minimum transitions.

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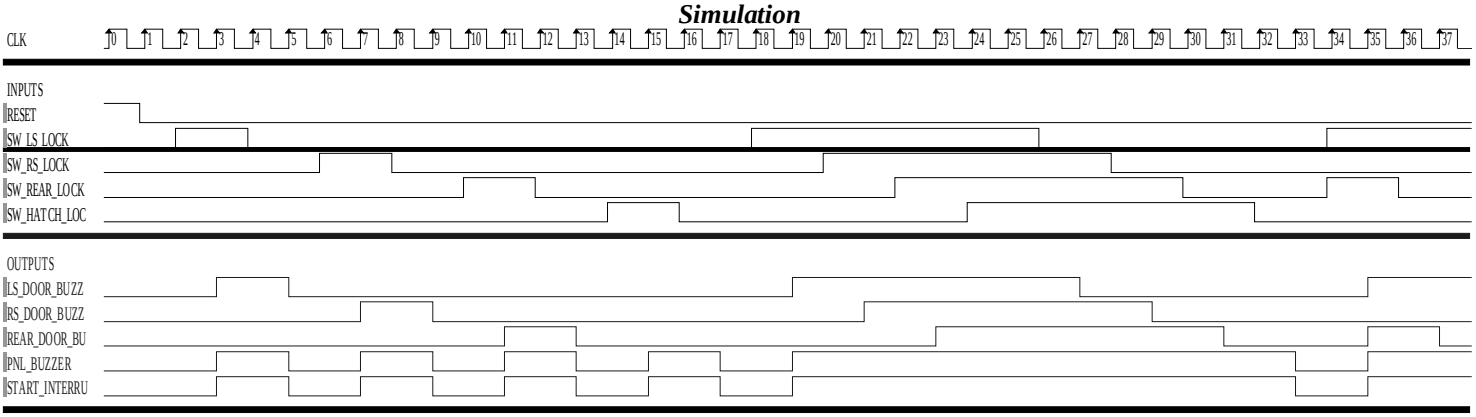
FRONT, LEFT-SIDE, RIGHT-SIDE AND REAR EMERGENCY DOOR VANDALOCK OPERATION

D303200000

Simulation



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