









Electrical Test Program – Survey of Electrical Limit Switch Signals

Operational sequence, opening hardtop









Limit switches engaged 1) corresponds to: Voltage measurements at the socket box (V) 2) corresponds to: Readouts on the HHT	Retractable hardtop				Trunk lid		Cover in trunk	Rotary latch
	locked right	locked left	closed	open/stored	open	closed/locked	closed	closed
	S69/2	S69/3	S69/1	S69/11	S69/9	S69/7 S69/8	S69/10	S69/12
Connection Diagram – Socket Box (22)	 \perp 30	 \perp 30	 \perp 32	 \perp 33	 \perp 52	 \perp 37	 \perp 54	 \perp 69
Rest position, hardtop closed	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 11– 14 2) No	1) 11– 14 2) No	1) 0–1 2) Yes	1) 0–1 2) Closed	1) 0–1 2) Closed
Side windows open, Trunk lid unlocked, open and, Retractable hardtop unlocked	1) 11– 14 2) No	1) 11– 14 2) No	1) 0–1 2) Yes	1) 11– 14 2) No	1) 0–1 2) Yes	1) 11– 14 2) No	1) 0–1 2) Closed	1) 0–1 2) Closed
Retractable hardtop open/stored, Front side windows open	1) 11– 14 2) No	1) 11– 14 2) No	1) 11– 14 2) No	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 11– 14 2) No	1) 0–1 2) Closed	1) 0–1 2) Closed
Trunk lid closed and locked and Retractable hardtop locked	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 11– 14 2) No	1) 0–1 2) Yes	1) 11– 14 2) No	1) 0–1 2) Yes	1) 0–1 2) Closed	1) 0–1 2) Closed
After locking, elapsed time t=2 sec., Rear side windows go down for time t=2 sec.	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 11– 14 2) No	1) 0–1 2) Yes	1) 11– 14 2) No	1) 0–1 2) Yes	1) 0–1 2) Closed	1) 0–1 2) Closed
Front side windows go up.	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 11– 14 2) No	1) 0–1 2) Yes	1) 11– 14 2) No	1) 0–1 2) Yes	1) 0–1 2) Closed	1) 0–1 2) Closed

11.4 Retractable Hardtop (RH)

Model 170

Electrical Test Program – Survey of Electrical Limit Switch Signals

Operational sequence, closing hardtop

Limit switches engaged 1) corresponds to: Voltage measurements (V) at the socket box 2) corresponds to: Readouts on the HHT	Retractable hardtop				Trunk lid		Cover in trunk	Rotary latch
	locked right	locked left	closed	open/stored	open	closed/locked	closed	closed
	S69/2	S69/3	S69/1	S69/11	S69/9	S69/7 S69/8	S69/10	S69/12
Connection Diagram – Socket Box (22)	 └ 30	 └ 30	 └ 32	 └ 33	 └ 52	 └ 37	 └ 54	 └ 69
Rest position, Hardtop open	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 11–14 2) No	1) 0–1 2) Yes	1) 11–14 2) No	1) 0–1 2) Yes	1) 0–1 2) Closed	1) 0–1 2) Closed
Side windows open, Trunk lid unlocked, open and, Retractable hardtop unlocked	1) 11–14 2) No	1) 11–14 2) No	1) 11–14 2) No	1) 0–1 2) No	1) 0–1 2) Yes	1) 11–14 2) No	1) 0–1 2) Closed	1) 0–1 2) Closed
Retractable hardtop closed, Open side windows	1) 11–14 2) No	1) 11–14 2) No	1) 0–1 2) Yes	1) 11–14 2) No	1) 0–1 2) Yes	1) 11–14 2) No	1) 0–1 2) Closed	1) 0–1 2) Closed
Trunk lid closed, locked and hardtop locked	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 11–14 2) No	1) 11–14 2) No	1) 0–1 2) Yes	1) 0–1 2) Closed	1) 0–1 2) Closed
After locking, time t=0.3 sec., Rear side windows go down for time t=3 sec.,	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 0–1 2) Yes	1) 11–14 2) No	1) 11–14 2) No	1) 0–1 2) Yes	1) 0–1 2) Closed	1) 0–1 2) Closed

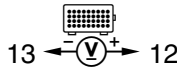
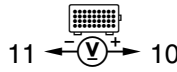
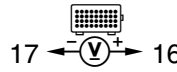
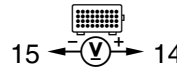
Electrical Test Program – Survey of Electrical Limit Switch Signals

Operational sequence, closing hardtop

Limit switches engaged	Retractable hardtop				Trunk lid		Cover in trunk	Rotary latch
	locked right	locked left	closed	open/stored	open	closed/locked	closed	closed
1) corresponds to: Voltage measurements (V) at the socket box 2) corresponds to: Readouts on the HHT	S69/2	S69/3	S69/1	S69/11	S69/9	S69/7 S69/8	S69/10	S69/12
Rear side windows go up (close)	1) 0-1 2) Yes	1) 0-1 2) Yes	1) 0-1 2) Yes	1) 11-14 2) No	1) 11-14 2) No	1) 0-1 2) Yes	1) 0-1 2) Closed	1) 0-1 2) Closed
Side windows go up (close)	1) 0-1 2) Yes	1) 0-1 2) Yes	1) 0-1 2) Yes	1) 11-14 2) No	1) 11-14 2) No	1) 0-1 2) Yes	1) 0-1 2) Closed	1) 0-1 2) Closed

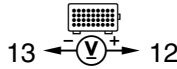
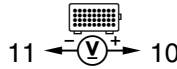
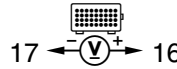
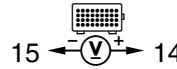
Electrical Test Program – Survey of Side Windows Activation

Operational sequence, opening retractable hardtop

Limit switches engaged 1) corresponds to: Voltage measurements at the socket box (V) 2) corresponds to: Readouts on the HHT	Power window motors actuation.			
	left front (M10/3)	right front (M10/4)	left rear (M10/5)	right rear (M10/6)
Connection Diagram – Socket Box (22)				
Front side windows open, Rear side windows go down for time t=3 sec., Trunk lid unlocks, opens and, Hardtop unlocks	1) -11 to -14 volts 2) open	1) -11 to -14 volts 2) open	1) -11 to -14 volts 2) open	1) -11 to -14 volts 2) open
Retractable hardtop open (stored) Front side windows go down	1) -11 to -14 volts 2) open	1) -11 to -14 volts 2) open	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated
Trunk lid closes, locks and Retractable hardtop locks	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated
After locking, time t=2 sec Rear side windows go down for time t=2 sec	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated	1) -11 to -14 volts 2) open	1) -11 to -14 volts 2) open
Front side windows go up	1) 11 to 14 volts 2) close	1) 11 to 14 volts 2) close	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated

Electrical Test Program – Survey of Electrical Limit Switch Signals

Operational sequence, closing retractable hardtop

Limit switches engaged 1) corresponds to: Voltage measurements at the socket box (V) 2) corresponds to: Readouts on the HHT	Power window motors actuation.			
	left front (M10/3)	right front (M10/4)	left rear (M10/5)	right rear (M10/6)
Connection Diagram – Socket Box (22)				
Front side windows go down, Trunk lid unlocks, opens and, Hardtop unlocks	1) -11 to -14 volts 2) open	1) -11 to -14 volts 2) open	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated
Retractable hardtop closes, Front side windows go down	1) -11 to -14 volts 2) open	1) -11 to -14 volts 2) open	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated
Trunk lid closes, locks, and Hardtop locks	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) close	1) 0 - 1 V 2) close
After locking time t=3 sec. Rear side windows go up	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated	1) 11 to 14 volts 2) close	1) 11 to 14 volts 2) close
Front side windows go up	1) 11 to 14 volts 2) close	1) 11 to 14 volts 2) close	1) 0 - 1 V 2) not actuated	1) 0 - 1 V 2) not actuated