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2018 Chrysler Pacifica

Dual Pane Sunroof & Sunshade

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DUAL PANE SUNROOF AND SUNSHADE

The hard wired circuits between components related to the operation of the dual pane power sunroof and sunshade system may be diagnosed using conventional diagnostic tools and procedures. Refer to the appropriate wiring information. The wiring information includes wiring diagrams, connector pin-out information and location views for the various wire harness connectors, splices and grounds.

However, conventional diagnostic methods will not prove conclusive in the diagnosis of the electronic module integral to the power sunroof or power sunshade motor. If the power sunroof or power sunshade switches, motors and circuitry test okay, but the express or obstacle detection features are still ineffective following the initialization procedures, the motor and module unit must be replaced.

DUAL PANE SUNROOF SYSTEM

- **Check electrical system voltage** - There should be at least 12.5 volts when measured at the battery terminals.
- **Ignition switch position** - The ignition switch should be in the ON or ACCESSORY positions with the engine not running.
- **Note the power sunroof responses** - Depress each of the sunroof switch push buttons one at a time and note the system responses. Try both express (short press duration) and manual (long press duration) for each push button.
- **Note the power sunshade responses** - Depress each of the sunshade switch push buttons one at a time and note the system responses. Try both express (short press duration) and manual (long press duration) for each push button.

Match the noted system responses to the conditions listed in the diagnostic table to determine the possible causes and corrections for the condition.

CONDITION	POSSIBLE CAUSES	CORRECTION
POWER SUNROOF ONLY RESPONDS TO SUNROOF VENT SWITCH PRESS OR POWER SUNSHADE ONLY RESPONDS	1. Sunroof motors have lost calibration.	1. Perform re-initialization & obstacle detection calibration procedure (Refer to Electrical/8N - Power Systems/Power Top, Sunroof/Standard Procedure).

CONDITION	POSSIBLE CAUSES	CORRECTION
TO SUNSHADE CLOSE SWITCH PRESS		
SUNSHADE IN CLOSED WHEN GLASS IS OPEN OR VENTED	1. Sunroof motors have lost calibration.	1. Perform re-initialization & obstacle detection calibration procedure (Refer to Electrical/8N - Power Systems/Power Top, Sunroof/Standard Procedure).
POWER SUNROOF AND POWER SUNSHADE COMPLETELY INOPERATIVE AND UNRESPONSIVE TO ALL SWITCH PRESSES	1. Thermal protection feature on motor active.	1. If the sunroof or sunshade has been cycled consecutively several times with little pause between cycles the motor thermal protection may engage and stop responding to all switch inputs if the sunroof or sunshade is fully closed. For thermal protection to deactivate the vehicle ignition must be set to ON/Run or Accessory, do not attempt to operate sunroof for at least two minutes to allow motor(s) to cool and the thermal protection to become inactive, then test again.
	2. Blown sunroof feed B(+) fuse.	2. Inspect sunroof B(+) fuse located in Power Distribution Center (PDC) and replace if required. Refer to Wiring Diagrams for correct fuse identification (BODY/ SUNROOF/POWER TOP SYSTEM).
	3. Blown ignition feed fuse.	3. Inspect ignition feed fuse located in Power Distribution Center (PDC) and replace if required. Refer to Wiring Diagrams for correct fuse identification (BODY/ SUNROOF/POWER TOP SYSTEM).
	4. Wire harness not connected to overhead console sunroof control switches	4. Lower overhead console to confirm MODULE-ELECTRONIC OVERHEAD C1 harness connector is connected to overhead console.
	5. Broken ground circuit.	5. Disconnect INLINE-MIRROR INT JUMPER/SUNROOF wire harness connection at sunroof and test if the GROUND pin in the INLINE-MIRROR INT JUMPER/SUNROOF vehicle harness connector is grounding to body. Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors/ INLINE-MIRROR INT JUMPER/SUNROOF). If circuit is found to be broken inspect for bent connector

CONDITION	POSSIBLE CAUSES	CORRECTION
		pin (see item #9) or wire damage and repair ground circuit if necessary.
	6. Broken fused B(+) circuit	6. Disconnect the INLINE-MIRROR INT JUMPER/SUNROOF wire harness at sunroof and measure the voltage between GROUND pin and FUSED B(+) pin in the INLINE-MIRROR INT JUMPER/SUNROOF vehicle harness connector with vehicle battery connected. Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors/ INLINE-MIRROR INT JUMPER/SUNROOF). If no battery voltage detected on FUSED B(+) circuit inspect for bent connector pin (see item #9) or wiring damage and repair FUSED B(+) circuit if necessary.
	7. Broken fused ignition (RUN-ACC) circuit.	7. Disconnect the INLINE-MIRROR INT JUMPER/SUNROOF wire harness at sunroof and measure the voltage between GROUND pin and FUSED IGNITION pin in the INLINE-MIRROR INT JUMPER/SUNROOF connector with vehicle battery connected and ignition set to ON/Run. Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors/ INLINE-MIRROR INT JUMPER/SUNROOF). If no battery voltage detected on IGNITION (RUN-ACC) circuit with ignition ON inspect for bent connector pin (see item #9) or wiring damage and repair IGNITION (RUN-ACC) circuit if necessary.
	8. Broken SUNROOF SWITCH SUPPLY circuit	8. Disconnect the MODULE-ELECTRONIC OVERHEAD C1 connection at overhead console and confirm that connector pin for SUNROOF SWITCH SUPPLY grounds out to body (refer to BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors/ MODULE-ELECTRONIC OVERHEAD C1 in wiring information). If SUNROOF SWITCH SUPPLY does not ground to body inspect circuit for damaged wire or bent pin and repair if necessary.
	9. Bent connector pin for B(+), Ground circuit or Ignition (RUN-ACC) circuit	9. Disconnect wire harness connections at: - MOTOR-SUNROOF or MOTOR-SUNROOF SHADE - INLINE-MIRROR INT JUMPER/SUNROOF - INLINE-

CONDITION	POSSIBLE CAUSES	CORRECTION
	at one of the wire harness connections between the sunroof and Power Distribution Center	IP/MIRROR INT JUMPER 2 - INLINE-DASH/IP - ASSEMBLY-POWER DISTRIBUTION CENTER C3 Inspect each connector closely for bent connector pin. Refer to Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM /Diagram). Replace wire harness or repair if bent connector pin found.
	10. Defective sunroof/sunshade switch assy in overhead console.	10. Test and replace the sunroof/sunshade switch assy (overhead console assembly) if required.
	11. Defective sunroof/sunshade motor	11. Replace the sunroof/sunshade motor if required.
SLIGHT SUNROOF OR SUNSHADE MOVEMENT OR AUDIBLE RELAY CLICKS BUT WILL NOT COMPLETE MOVEMENT FOR ANY SUNROOF CONTROL SWITCH ACTUATIONS	1. Binding glass mechanism or binding sunshade guide due to debris or obstruction in aluminum guide rail.	1. Remove the debris or obstruction from sunroof guide rail.
	2. Defective sunroof/sunshade motor or broken drive cable or mechanism	2. Remove the sunroof or sunshade motor from sunroof assy but do not disconnect wire harness. Attempt to operate motor with sunroof control switches in overhead console and ignition in ACCESSORY. If motor will not operate replace the defective motor. If motor does cycle/operate when removed from sunroof assy it is likely that a drive cable or mechanism has failed; if this is confirmed it is necessary to replace the entire sunroof frame.
GLASS OR SUNSHADE AUTO REVERSES DURING EXPRESS CLOSE OPERATION BUT NO OBSTRUCTION PRESENT IN ROOF OPENING	1. Debris or obstruction in sunroof guide rails interfering with sunroof mechanism or sunshade guides.	1. Fully open sunroof glass or sunshade and inspect sunroof aluminum guide rails for debris that may be interfering with sliding mechanisms and clean as necessary.
	2. Debris under wind deflector springs not allowing wind deflector to properly retract during close operation.	2. Inspect for debris under wind deflector springs and remove as necessary.

CONDITION	POSSIBLE CAUSES	CORRECTION
POWER SUNROOF OPENS TO VENT AND CLOSES FROM VENT BUT DOES NOT SLIDE OPEN OR POWER SUNSHADE CLOSES BUT DOES NOT OPEN (SUNROOF OPEN OR VENT SWITCH STILL AUTO OPENS SUNSHADE BUT NO RESPONSE TO SUNSHADE OPEN SWITCH)	3. Sunroof obstacle detection system requires re-calibration	3. Perform re-initialization & obstacle detection calibration procedure (Refer to Electrical/8N - Power Systems/Power Top, Sunroof/Standard Procedure).
	1. Defective sunroof OPEN or sunshade OPEN switch in overhead console.	1. Lower overhead console and disconnect MODULE-ELECTRONIC OVERHEAD C1 wire connection and test switch to confirm circuit closes between SUNROOF OPEN SENSE SWITCH or SUNROOF SHADE PWR OPEN and SUNROOF SWITCH SUPPLY pins while OPEN switch is pressed. Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors/ MODULE-ELECTRONIC OVERHEAD C1). Replace switch if necessary.
	2. Broken SUNROOF OPEN SWITCH SENSE or SUNROOF SHADE PWR OPEN circuit.	2. Disconnect wire harness connections: - MOTOR-SUNROOF or MOTOR-SUNROOF SHADE at sunroof motors - MODULE-ELECTRONIC OVERHEAD C1 at overhead console Test the continuity of the SUNROOF OPEN SWITCH SENSE or SUNROOF SHADE PWR OPEN circuits. Refer to Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors). Proceed to Step 3 if broken circuit found. Proceed to Step 5 if circuit tests OK.
	3. Bent connector pin for OPEN switch circuit at one of the wire harness connections between the sunroof and overhead console sunroof/sunshade control switch	3. Disconnect wire harness connections at: - MOTOR-SUNROOF or MOTOR-SUNROOF SHADE - INLINE-MIRROR INT JUMPER/SUNROOF - INLINE-IP/MIRROR INT JUMPER 2 - INLINE-HEADLINER/IP 2 - MODULE-ELECTRONIC OVERHEAD C1 Inspect each connector closely for bent connector pin. Replace wire harness or repair if bent connector pin found. If no bent connector pins found proceed to Step 4.
	4. Broken or damaged wire between sunroof or sunshade OPEN switch in overhead console and sunroof motors.	4. Inspect wire harnesses for SUNROOF OPEN SWITCH SENSE or SUNROOF SHADE PWR OPEN circuit continuity between: - INLINE-MIRROR INT JUMPER/SUNROOF and INLINE-IP/MIRROR INT JUMPER 2 - INLINE-IP/MIRROR INT JUMPER 2 and INLINE-HEADLINER/IP 2 - INLINE-HEADLINER/IP 2 and MODULE-ELECTRONIC OVERHEAD C1 Refer to Wiring Diagrams for connector pin outs (BODY/

CONDITION	POSSIBLE CAUSES	CORRECTION
		SUNROOF/POWER TOP SYSTEM/ Connectors). Repair or replace wire harness with broken circuit.
	5. Defective sunroof or sunshade motor assy.	5. Replace the sunroof or sunshade motor if required.
POWER SUNROOF VENTS AND SLIDES OPEN BUT DOES NOT CLOSE (VENT SWITCH NEEDS TO BE PRESSED TO CLOSE SUNROOF FROM SLIDE OPEN POSITION OR OPEN SWITCH NEEDS TO BE PRESSED TO CLOSE SUNROOF FROM VENT POSITION) OR POWER SUNSHADE OPENS BUT DOES NOT CLOSE	1. Defective sunroof or sunshade CLOSE switch in overhead console.	1. Lower overhead console and disconnect MODULE-ELECTRONIC OVERHEAD C1 wire connection and test switch to confirm circuit closes between SUNROOF CLOSE SENSE SWITCH or SUNROOF SHADE PWR CLOSE and SUNROOF SWITCH SUPPLY pins while CLOSE switch is pressed. Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors/ MODULE-ELECTRONIC OVERHEAD C1). Replace switch if necessary.
	2. Broken SUNROOF CLOSE SWITCH SENSE or SUNROOF SHADE PWR CLOSE circuit.	2. Disconnect wire harness connections: - MOTOR-SUNROOF or MOTOR-SUNROOF SHADE at sunroof motors - MODULE-ELECTRONIC OVERHEAD C1 at overhead console Test the continuity of the SUNROOF CLOSE SWITCH SENSE or SUNROOF SHADE PWR CLOSE circuits. Refer to Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors). Proceed to Step 3 if broken circuit found. Proceed to Step 5 if circuit tests OK.
	3. Bent connector pin for CLOSE switch circuit at one of the wire harness connections between the sunroof and overhead console sunroof/sunshade control switch	3. Disconnect wire harness connections at: - MOTOR-SUNROOF or MOTOR-SUNROOF SHADE - INLINE-MIRROR INT JUMPER/SUNROOF - INLINE-IP/MIRROR INT JUMPER 2 - INLINE-HEADLINER/IP 2 - MODULE-ELECTRONIC OVERHEAD C1 Inspect each connector closely for bent connector pin. Replace wire harness or repair if bent connector pin found. If no bent connector pins found proceed to Step 4.
	4. Broken or damaged wire between sunroof or sunshade CLOSE switch in overhead console and sunroof motors.	4. Inspect wire harnesses for SUNROOF CLOSE SWITCH SENSE or SUNROOF SHADE PWR CLOSE circuit continuity between: - INLINE-MIRROR INT JUMPER/SUNROOF and INLINE-IP/MIRROR INT JUMPER 2 - INLINE-IP/MIRROR INT JUMPER 2 and INLINE-HEADLINER/IP 2 - INLINE-HEADLINER/IP 2 and MODULE-ELECTRONIC OVERHEAD C1 Refer to

CONDITION	POSSIBLE CAUSES	CORRECTION
		Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors). Repair or replace wire harness with broken circuit.
	5. Defective sunroof/sunshade motor assy.	5. Replace the sunroof/sunshade motor if required.
POWER SUNROOF SLIDES OPEN AND CLOSE BUT WILL NOT VENT	1. Defective sunroof VENT switch in overhead console.	1. Lower overhead console and disconnect MODULE-ELECTRONIC OVERHEAD C1 wire connection and test switch to confirm circuit closes between SUNROOF VENT SWITCH SENSE and SUNROOF SWITCH SUPPLY while VENT switch is pressed. Refer to Wiring Diagrams for connector pin out (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors/ MODULE-ELECTRONIC OVERHEAD C1). Replace switch if necessary.
	2. Broken SUNROOF VENT SWITCH SENSE circuit.	2. Disconnect wire harness connections: - MOTOR-SUNROOF at sunroof motors - MODULE-ELECTRONIC OVERHEAD C1 at overhead console Test the continuity of the SUNROOF VENT SWITCH SENSE circuit. Refer to Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors). Proceed to item 3 if broken circuit found. Proceed to item 5 if circuit tests OK.
	3. Bent connector pin for VENT switch circuit at one of the wire harness connections between the sunroof and overhead console sunroof/sunshade control switch	3. Disconnect wire harness connections at: - MOTOR-SUNROOF - INLINE-MIRROR INT JUMPER/SUNROOF - INLINE-IP/MIRROR INT JUMPER 2 - INLINE-HEADLINER/IP 2 - MODULE-ELECTRONIC OVERHEAD C1 Inspect each connector closely for bent connector pin. Replace wire harness or repair if bent connector pin found. If no bent connector pins found proceed to item 4.
	4. Broken or damaged wire between sunroof VENT switch in overhead console and sunroof motors.	4. Inspect wire harnesses for SUNROOF VENT circuit continuity between: - MOTOR-SUNROOF and INLINE-MIRROR INT JUMPER/SUNROOF - INLINE-MIRROR INT JUMPER/SUNROOF and INLINE-IP/MIRROR INT JUMPER 2 - INLINE-IP/MIRROR INT JUMPER 2 and INLINE-HEADLINER/IP 2 - INLINE-HEADLINER/IP 2 and MODULE-ELECTRONIC OVERHEAD C1 Refer to

CONDITION	POSSIBLE CAUSES	CORRECTION
		Wiring Diagrams for connector pin outs (BODY/ SUNROOF/POWER TOP SYSTEM/ Connectors). Repair or replace wire harness with broken circuit.
	5. Defective sunroof motor assy.	5. Replace the sunroof motor if required.
POWER SUNROOF OR SUNSHADE INTERMITTENTLY VENTS, OPENS OR CLOSES ON ITS OWN WITHOUT USER SWITCH INPUT WHILE DRIVING VEHICLE	1. OPEN, CLOSE, or VENT switch circuit wire between sunroof switch and sunroof is pinched against body (wire insulation damaged) and intermittently grounding out to body.	1. Inspect circuit for the operation that is intermittently occurring (SUNROOF VENT SWITCH SENSE, SUNROOF OPEN SWITCH SENSE, SUNROOF CLOSE SWITCH SENSE, SUNROOF SHADE PWR OPEN, SUNROOF SHADE PWR CLOSE). Inspect for cut wire insulation or pinch conditions against sheet metal body and repair/replace if necessary. Refer to Wiring Diagrams (BODY/ SUNROOF/POWER TOP SYSTEM).
POWER SUNROOF GLASS OR POWER SUNSHADE MOVES ONLY WHEN SWITCH IS PRESSED AND HELD (MANUAL MODE - LOSS OF ONE-TOUCH OR EXPRESS MODE)	1. Sunroof motors have lost calibration.	1. Perform re-initialization & obstacle detection calibration procedure (Refer to Electrical/8N - Power Systems/Power Top, Sunroof/Standard Procedure).